

# An Exploratory Study of Primary Pupils' Experiences of Reading to Dogs

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A thesis submitted in partial fulfilment of the requirements of the University of East  
London for the degree of Professional Doctorate in Educational Psychology

February 2015

## **Abstract**

Reading to Dogs is an animal-assisted intervention (AAI) programme used to support primary school children's reading. AAI is an emerging area with an extremely limited evidence base. The purpose of this research was to explore current practice within primary schools in the local authority regarding Reading to Dogs, and to generate a theoretical explanation of Reading to Dogs.

A sequential, two phase, mixed methods design was employed from a pragmatic stance. The first phase consisted of structured telephone interviews with nineteen primary schools from the local authority to audit current practice. Anonymised reading scores for 89 children to have participated in the programme were also obtained from schools. The second phase employed a classic grounded theory methodology. Data from the first phase, together with ten individual interviews, was analysed using the constant comparative method to generate a substantive theory of Reading to Dogs.

The audit established that a small minority of primary schools within the local authority currently run Reading to Dogs with children displaying emotional needs. Children's baseline and post-measure reading ages increased by an average of five months following their participation in Reading to Dogs, with an average ratio gain of two months' reading age for each month of participation.

Playful reading, the substantive theory generated in this research, explains how Reading to Dogs supports children to develop a more playful attitude toward reading. Key concepts of building a close relationship with the reading dog and establishing a mental capital of positive emotions are central to playful reading. The reading dogs' ability to demonstrate listening and children's increasing application of their reading skills also feature prominently in the theory.

## **Acknowledgements**

A number of people have contributed to my ability to complete this thesis and I am extremely fortunate to be surrounded by such wonderful people.

I am immensely grateful to all of my friends and family, for tolerating my absence at various social events throughout this research, for their meticulous proofreading, and for their ongoing love and support, without which I would have been utterly overwhelmed long ago.

I would like also like to take this opportunity to express my particular thanks to Dr Mark Fox, my university supervisor, for his wisdom and enduring patience.

I would like to thank my EP colleagues, both from my UEL cohort and in the Educational Psychology Service where I work, for helping me to retain a sense of perspective.

Finally, I would like to thank the many schools who participated in this research, whose enthusiasm for Reading to Dogs inspired me to persevere, and the children, whose words kept a smile on my face.

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# **1. Introduction**

## **1.1 Primary School Children's Reading**

Recent decades have seen increasing numbers of Government initiatives designed to raise primary school children's attainment in literacy, with a particular focus on reading.

At the end of Key Stage 2, children are expected to achieve National Curriculum level 4 or above in reading. The present research is situated within a large, rural authority area comprising almost 600 schools. In 2014, over fifteen thousand children were eligible for the Key Stage 2 National Curriculum assessments in this authority area. Eighty-nine percent of these children attained level 4 or above in reading, the same percentage as the national average for England (Department for Education, 2014).

These statistics indicate that, in this authority area alone, over one and a half thousand children were leaving primary school without attaining the required standard for reading.

### **1.1.1 National Strategies**

In 1996 only 57% of children leaving primary school were achieving level 4 or above, leaving 43% attaining below the expected level. The National Literacy Strategy (NLS) was established in 1997 with the aim, by 2002, of increasing the number of children attaining level 4 at Key Stage 2 to 80% (Beard, 2000).

The NLS provided a framework for teaching literacy with termly teaching objectives split into text, sentence and word level skills for each primary year group and a structured format for daily literacy sessions, named the Literacy Hour (Alexander, 2000). The NLS focussed on the mechanics of reading to

develop children's reading skills, teaching phonological skills and awareness in Key Stage 1 and moving more toward contextual and grammatical cues in Key Stage 2 (Department for Education and Skills, 2006).

The recommendations and guidance of the NLS sparked a rise in attainments at Key Stage 2 and by 2000 75% of children were obtaining level 4 in English, with 83% attaining level 4 in reading (Department for Education, 2014). This progress was not however sustained and national assessment results plateaued for four years, with 17% of children persistently achieving below level 4 in reading.

A review of research related to the NLS (Beard, 2000) asserted that whilst 80% of children could increase their attainment through high quality teaching, as described in the NLS, a further 18% would need targeted support and the remaining 2% would likely need additional and specialised support to develop their reading. The review also recognised that in order to be effective in raising children's literacy attainment, schools need to be informed of best practice and how to implement it, adding that the most effective interventions were adapted from established, existing programmes rather than locally developed, bespoke schemes (Beard, 2000).

The 2006 Rose Review subsequently reviewed the teaching of reading and its findings emphasised the significant role of a systematic approach to phonics in teaching children to read (Rose, 2006). Although the teaching of phonics was included in the NLS, the Rose Review cited reports from Her Majesty's Inspectorate in which phonics "*was often a neglected or weak feature of the teaching*" (Rose, 2006, p.4). The Rose Review further commented that while phonics teaching was included in both the NLS and National Curriculum,

schools required more information about how best to embed phonics across their teaching practice.

The Every Child a Reader (ECaR) programme was introduced in 2005 with the aim of providing reading support and interventions to 30,000 children each year until 2011 (Department for Children, Schools and Families, 2009). ECaR described a layered approach to reading interventions, focussing initially on whole class quality teaching (Wave 1), then small group interventions to accelerate children's progress in line with their peers (Wave 2), finally to more individualised, intensive reading interventions (Wave 3). The ECaR programme recommended a number of evidence based reading interventions for Wave 2, based on a range of phonics approaches and explicit teaching of reading strategies. Reading Recovery was promoted as the main Wave 3 intervention of ECaR (Tanner, et al., 2011).

Reading Recovery is an early intervention programme, designed to support children who, at the start of their school education, are struggling to learn to read through individual, intensive sessions with a trained Reading Recovery teacher (Tanner, et al., 2011). Introduced to the UK in 1990, government funding for Reading Recovery training between 1992 and 1995 saw widespread adoption of the scheme however this lapsed until the funding was reinstated in 2005 as part of ECaR (Brooks, 2007). By the end of 2010, there were over 2,250 accredited Reading Recover teachers in the UK (Department for Education, 2011).

Solity and Vousden (2009) have heavily criticised the National Strategies' over-emphasis on teaching systematic phonics and structured reading schemes, often involving restricted vocabulary. They propose an alternative approach, advocating the application of instructional psychology principles to teaching the

phonetic decoding skills used in reading. Solity and Vousden (2009) argue teaching should focus on explicit instruction of the phonic skills most useful to children in learning to read i.e. the most generalisable skills (rather than those which emerge first) presented in a range of genuine contexts (i.e. 'real' books instead of preconceived text extracts and reading scheme books).

Solity has published a number of comprehensive research projects investigating the benefits of applying instructional psychology to teaching reading, such as Early Reading Research (Solity, Deavers, Kerfoot, Crane, & Cannon, 1999) and the application of the simplicity principle (Vousden, Ellefson, Solity, & Chater, 2011). Despite the evidence to support these assertions, it is unclear whether these research findings have impacted on classroom practice or the extent to which schools have implemented the recommended instructional psychology principles.

### **1.1.2 Researching Effective Interventions**

In 2007 the National Foundation for Educational Research commissioned a review of the effectiveness of literacy interventions currently in use throughout the UK (Brooks, 2007). The report outlined 41 intervention schemes aimed at targeting reading at primary school level and analysed the evidence base for each, to establish their effectiveness and to inform practice. Brooks noted the influence of the Rose Review in approaches to teaching reading, as demonstrated by the substantial increase in phonics-based interventions in comparison to a previous review in 2002 (Brooks, 2002).

The majority of interventions designed to target reading focussed on a phonological approach to reading, with several more adopting a 'partnership' approach, whereby children were partnered with more able readers (either other children or adults), as well as a number of computer-based programmes.

Brooks concluded that the majority of phonological schemes were effective, particularly when incorporated into a broader, language-rich curriculum. In addition, he emphasised the importance of training and ongoing support for partnership readers in order to appropriately manage children's reading difficulties, while commenting that children using ICT-based schemes needed to be carefully supervised to ensure they accessed material effectively.

In 2013, the Dyslexia-SpLD Trust commissioned another review (Brooks, 2013) which acknowledged at least 80 currently available literacy intervention schemes. To keep the review manageable, Brooks applied more stringent inclusion criteria (e.g. the scheme must be currently available and shown to have an effect size of at least 0.5). The resulting report reviewed 32 interventions in detail with Brooks commenting that "*very little of the new evidence in this fourth edition has led me to revise the conclusions reached in the third edition; nor has the dropping of some evidence from that edition*" (Brooks, 2013, p. 13).

### **1.1.3 Attitudes to Reading**

The national strategies have predominantly focussed on the mechanics of reading, explicitly teaching phonemic decoding skills and similar reading strategies, however they gave little consideration of the emotional aspects of reading. Reading aloud is acknowledged to be a stressful activity, with research findings demonstrating increases in children's blood pressure and heart rate when reading at school (Thomas, et al., 1984).

Included in Brooks' (2007) review is a single intervention targeting self-esteem in relation to reading. Educational Psychologist Denis Lawrence, who designed the intervention, believed there to be a clear link between self-esteem and low attainment, further asserting that both areas needed to be addressed in order to

support the development of children's reading (Lawrence, 1988). Lawrence completed a series of research projects, combining self-esteem interventions with reading interventions, which yielded promising results suggesting his ideas had some substance.

In his review of the research, Brooks noted that the benefits of combining reading and self-esteem interventions had not been substantially explored since Lawrence's original studies in the 1970's, commenting:

*"Even though no further comparable studies seem to have been done for over 20 years, working on self-esteem and reading in parallel would seem to have definite potential"*

*(Brooks, 2007, p.27)*

The Progress in International Reading Literacy Study (PIRLS) (Twist, Sizmur, Bartlett, & Lynn, 2012) is an international review of children's reading achievement which explores reading attainment and attitudes to reading among Key Stage 2 children in a number of countries. Nearly four thousand children from the UK participated in the 2011 PIRLS.

The main findings of the 2011 PIRLS were that England had a very broad range of reading achievement, with some children scoring extremely high on assessments, and also a greater proportion of low scores than other high attaining countries (Twist, Sizmur, Bartlett, & Lynn, 2012). In addition, 10% of children rated themselves as 'not confident' in reading, whilst 20% responded they 'do not like reading'. Negative attitudes toward reading such as these were also correlated with lower attainment in reading.

A recent national survey of children and young people's reading in the UK found similar patterns of reading enjoyment and attainment, with 10% reportedly not enjoying reading and a further 37% only enjoying reading a bit (Clark, 2014). In addition, children who responded as enjoying reading were four times more



likely to read above their age-expected level than peers who did not enjoy reading.

#### **1.1.4 Creative Solutions**

Despite the repeated national initiatives, as described above, which addressed both whole class teaching practice and more targeted interventions, national assessments of reading at Key Stage 2 in 2014 found 11% of children were still not attaining level 4.

Few of these national initiatives have addressed the emotional aspects of reading, despite research which shows significant numbers of children who report not enjoying reading (Clark, 2014) and lack confidence in their abilities (Twist, Sizmur, Bartlett, & Lynn, 2012).

In an effort to meet these emotional needs and support children in developing their reading abilities, schools are looking to increasingly creative ways to raise attainment. One such alternative approach is through animal-assisted interventions.

### **1.2 Animal-Assisted Interventions**

#### **1.2.1 Terminology**

Animal-assisted interventions (AAI) deliberately involve the use of animals in a number of activities for a range of recreational, therapeutic and assistive purposes.

AAI may be active (e.g. riding a horse) or passive (e.g. watching fish in a tank), and can be classified into multiple subcategories including animal-assisted therapy (AAT), animal-assisted education (AAE) and animal-assisted activities (AAA). There is some inconsistency in the use of terminology throughout AAI literature and the term animal-assisted therapy in particular has been applied to

a wide range of intervention programmes, not all of which are therapeutic (Kruger & Serpell, 2010).

Animal Assisted Interventions International (AAll), a non-profit organisation specialising in animal-assisted interventions in professional healthcare and social service settings, published the following definitions of AAI in an attempt to create a more standardised use of terminology:

*Animal-assisted therapy (AAT): An AAT intervention is formally goal-directed and designed to promote improvement in physical, social, emotional and/or cognitive functioning of the person(s) involved and in which a specially trained animal-handler team is an integral part of the treatment process.*

*Animal-assisted education (AAE): An AAE intervention is formally goal-directed and designed to promote improvement in cognitive functioning of the person(s) involved and in which a specially trained animal-handler team is an integral part of the educational process.*

*Animal-assisted activity (AAA): An AAA intervention is less goal-directed as specific objectives may not be planned. These interventions are more spontaneous, often no notes are taken nor records kept.*

*(Animal Assisted Intervention International, 2010)*

Assistance animals (e.g. guide dogs, hearing dogs) are excluded from the definitions of AAI. The Equality Act 2010 (Great Britain, 2010) provides the following definition of an assistance dog:

*“Assistance dog” means—*

*(a) a dog which has been trained to guide a blind person;*

*(b) a dog which has been trained to assist a deaf person;*

*(c) a dog which has been trained by a prescribed charity to assist a disabled person who has a disability that consists of epilepsy or otherwise affects the person's mobility, manual dexterity, physical co-ordination or ability to lift, carry or otherwise move everyday objects;*

*(d) a dog of a prescribed category which has been trained to assist a disabled person who has a disability (other than one falling within paragraph (c)) of a prescribed kind.*

*(Great Britain. Equality Act 2010: Elizabeth II. Part 12, Chapter 1, Section 173, 2010)*

### **1.2.2 Review of Relevant Literature**

The present research is concerned with the use of AAI to support the development of children's reading. A systematic review of published literature in this area conducted in January 2014, using the search terms "child", "read" and "animal", returned 168 results from peer-reviewed journals. An examination of these results identified only a single published research paper and two anecdotal articles relevant to this topic. Full details of the search criteria are provided in Appendix 1 to this thesis.

A subsequent hand search of other literature in the wider area of AAI identified further relevant research papers, with additional research found by examining cited references in these articles.

It is interesting to note that while there is very limited published research into the use of AAI to support reading, five doctoral theses have been completed in this area, two in the last five years. Most of this unpublished work focuses on international students with learning disabilities and emotional needs.

As AAI is an emerging area of research with such a limited evidence base in regard to children's reading, rather than the typical literature review, a narrative overview of key thinking and publications in the wider area of AAI is presented here. A brief critical overview of each doctoral thesis is also included, with an expanded discussion of more relevant papers.

### **1.2.3 Historical Overview of Animal Assisted Interventions**

The belief that animals can contribute to the wellbeing of humans is by no means a modern notion. Many ancient civilisations, such as the Egyptians, Babylonians and Greeks, attributed health benefits to animals, viewing cats and dogs as sacred, symbolising the healing powers of the Gods (Serpell, 1986).

For several centuries vulnerable individuals, particularly children and those with mental health difficulties, have been encouraged to interact with animals (Parshall, 2003). In 1699 philosopher John Locke advocated children look after small animals to foster a sense of responsibility and tenderness toward others (Serpell, 2010). In the eighteenth century psychiatric inpatients at the York Retreat were encouraged to care for small domestic animals as it was believed this would elicit social and benevolent feelings (Levinson, 1997).

Since the nineteenth century, the Bethel institution in Germany has incorporated horse-riding, a working farm and various small companion animals into therapeutic support for inpatients experiencing a range of mental and physical difficulties (Serpell, 2010). A report by British Charity Commissioners in the 1830s recommended a number of small animals and birds be introduced to both the men and women's wards at Bethlem Hospital in order to create a less punitive, oppressive atmosphere (Serpell, 2010). In 1860 Florence Nightingale's notes on nursing included a note that medical patients benefited from the companionship of a small animal (Beck & Katcher, 2003).

In 1944-45 at a Red Cross rehabilitation centre for soldiers in New York, dogs were introduced primarily as a recreational support however many residents reportedly experienced therapeutic benefits from caring for the dogs. This resulted in widespread dog adoption amongst the soldiers and dog training sessions becoming incorporated into the centre's rehabilitation programme (Levinson, 1997).

In recent years researchers have investigated physical responses to interactions with animals. Hospitalised children's blood pressure and heart rate decreased following an AAT session and remained low after the session had

ended, with a significantly greater decrease seen for children receiving AAT than a comparison visit (Tsai, Friedmann, & Thomas, 2010).

A similar research project (Kaminski, Pellino, & Wish, 2002) also completed with hospitalised children found, however, that heart rates were increased after attending an AAT group as compared to a play therapy group. The authors explain the higher heart rate may be due to the children's excitement, as although heart rate was not monitored during the session, heart rates were higher both before and after in AAT group, suggesting anticipatory excitement.

Kaminski et al. (2002) also noted that a 'stressful event' was typically introduced in other research which found relationships between decreased heart rate and animals. In Tsai et al.'s (2010) study however there was no stressor for heart rate to respond to, suggesting that the experience of AAT can be beneficial for heart rate and blood pressure even when children are not experiencing stress as a response to a specific event.

#### **1.2.4 Animals in Therapeutic Settings**

In 1953 Boris Levinson, an American Child Psychotherapist, discovered the unplanned presence of his pet dog Jingles encouraged a previously reluctant child to engage in conversation (Levinson, 1997). Levinson continued to deliberately include his dog in future psychotherapy sessions which he reported facilitated the development of several client relationships and supported children to speak more openly during therapy sessions.

When Levinson shared his experiences at the American Psychological Association (APA) convention in 1961, many colleagues reportedly dismissed this practice with sceptical or derisive comments, however some revealed they had experienced similarly positive outcomes by involving animals in

psychological or therapeutic sessions (Levinson, 1997). These experiences suggest that the deliberate incorporation of animals into therapeutic contexts was more widespread in practice than might be thought, given the lack of reference to the therapeutic benefits of animals in psychological literature at the time.

Levinson wrote widely on the subject of 'pet therapy', referring to his dog as a 'co-therapist' and citing numerous psychological benefits of animals both as pets and therapeutic aids (Levinson, 1997). Much of Levinson's writing was reflective or anecdotal in nature, and lacked scientific rigour. In addition, as the animal involved was Levinson's own companion animal (pet), it is likely his perception of these benefits may have been biased. Nonetheless, Levinson is widely credited as the founder of modern animal-assisted interventions (AAI), as his work revived interest in the field and led to the development of multiple AAI programmes and related research.

Other researchers began to investigate the potential benefits of animals in therapeutic settings and of companion animals (i.e. pets).

By 1986 there was sufficient interest in research into AAI and human-animal interactions that the peer-reviewed academic journal *Anthrozoös* was launched, dedicated to publishing research in human-animal interactions. The formation of the International Society for Anthrozoology followed in 1999, a worldwide organisation supporting the scientific and academic study of human-animal interactions.

The field of AAI remained a marginal topic for many decades, however it is gaining recognition in some professional realms. In 2011 the American Psychological Association (APA) published a collection of papers exploring the existing research base into AAI (McCardle, McCune, Griffin, & Maholmes,

2011). The publication of this book from the APA indicates that research into AAI and human-animal interactions is gaining recognition within the field of psychology.

An increasing number of AAI programmes are practiced throughout the UK, predominantly through non-profit and charitable organisations such as Pet Partners, the Society for Companion Animal Studies and Intermountain Therapy Animals (Society for Companion Animal Studies, 2010).

These include: animal visitation schemes to care homes for the elderly (The Mayhew Animal Home, 2014), augmented social support for children with autism (Dogs for the Disabled, 2010), residential rehabilitation programmes for young offenders (Paws for Progress, 2014) and even equine-facilitated corporate networking opportunities (HorseSense, 2011).

Overall, media coverage of AAI is very positive, portraying AAI as beneficial if somewhat unconventional (Fine and Beck, 2010). The increasing use of AAI in the UK has been met with media interest in newspapers and bulletins (e.g. BBC News, 2010; Yeadon, 2011), television documentaries (e.g. Horsepower with Martin Clunes, 2010; BBC Horizon: Secret life of dogs, 2010; The wonder of dogs, 2013) and professional publications (e.g. Priestly, 2011; Wells, 2011). Recently AAI programmes in educational settings, especially those involving children reading to dogs, have been of particular media interest (e.g. Ward, 2010).

### **1.2.5 Animal Assisted Interventions in Educational Contexts**

AAI is an emerging area and as such there are few robust research papers investigating the empirical evidence for AAI programmes. AAI programmes most commonly involve vulnerable populations such as the physically disabled

(Liptak, 2005), children (Serpell, 1999) and individuals with autism (Pavlidis, 2008). Many animal-assisted education (AAE) programmes have targeted similar populations (Anderson and Olson, 2006), although not always within a traditional classroom environment (Ewing et al., 2007).

In the UK, Limond (1998) investigated the effect of animal-assisted activities (AAA) on the behaviour of children with special educational needs (SEN) who were attending specialist provision for severe learning disabilities. She carried out a series of small scale research projects.

Limond established that the involvement of a live dog during activities was superior to a stuffed toy dog in drawing children's attention and prompted an increase in the quality of these children's interactions (i.e. more appropriate communicative responses) although the overall number of interactions did not increase. She replicated these results among a group of children and young adults with severe and profound needs in the Czech Republic, suggesting the effect of the dog's presence was not culturally specific.

One of her research projects demonstrated that, during an obstacle course, a dog increased enthusiasm and motivation in high cognitive ability children with SEN (experiencing physical disabilities but without learning disabilities), however this effect was only noted when the tasks directly involved the dog, suggesting the dog was not seen as a reward for good performance.

Limond also revealed the involvement of a dog in individual sessions had a positive impact on the number of appropriate and desirable behaviours demonstrated by children and adults with SEN. The specific responses were somewhat idiosyncratic and reflected the individual participants' needs, however a positive impact was also found on specific, targeted behaviours.



In addition, Limond explored the impact of a dog on children's behaviour during educational tasks, comparing groups of children with severe learning disability and either high or low cognitive ability. The involvement of a dog in writing and maths tasks encouraged cooperative behaviours and evoked a greater number of appropriate physical responses to adult questions among SEN children with high cognitive ability, while increased involvement of the dog correlated to a greater impact on behaviour.

Limond concluded that AAA appear to be beneficial to children with a range of SEN. The findings indicate individual's needs resulted in a range of responses and any intervention should therefore be carefully planned and adapted to reflect the requirements of specific populations. Specifically, children with higher levels of cognitive ability and adaptability appeared to experience the greatest benefits from working with a dog. Limond also acknowledged the role of interactions between the dog, child and therapist in influencing the impact of the dog on children's behaviour.

The inclusion of a dog in educational activities provided a positive focus for attention and activities among children with SEN, although this focus was prompted by adults (Limond, 1998). In Limond's study the number of communicative instances initiated by children overall was not affected by involving the dog, however the dog did prompt initiations from the children about and toward the dog. Contrastingly, a smaller scale research project (Esteves & Stokes, 2008) found the presence of a dog increased the number of both verbal and nonverbal positive behaviours among developmentally disabled children.

More recently, a small number of robust research articles have also been published which examine the impact of animal presence in educational tasks:

Pre-school children's performance following instructions for motor tasks was improved when a dog modelled the task first, even in comparison to a human modelling the same task (Gee, Sherlock, Bennett, & Harris, 2009). However when tasks were performed in tandem, rather than modelling or competing, the children followed instructions best with a human or stuffed toy dog companion. The researchers suggest that copying would be harder alongside the real dog as dog's behaviours can be unpredictable. This finding somewhat undermines their claim that this research demonstrates that dogs act as a salient stimulus, gaining children's attention.

In a simple memory task, pre-school children needed fewer instructional prompts when in the presence of a familiar dog than when a toy dog or familiar human was present (Gee, Crist, & Carr, 2010), suggesting the children attended better to the task when the dog was present. These results were replicated with the same children after a gap of a few months, with fewer cues needed for the children to attend to the task or give a response when working with the real dog. The researchers deliberately selected a very simple object recognition task, easily achievable for all participants, in order that difficulty level did not affect children's adherence to the task. It is possible that the presence of a dog during a more challenging task might have served to distract the children.

Similarly, pre-school children made fewer errors during a categorisation task when a dog was present, than in the presence of a toy dog or human (Gee, Church, & Altobelli, 2010). Children were asked to create a 'bedtime book' for the dog, toy dog or human present by selecting photographs to pair with a stimulus photograph. The chosen pictures were categorised as having a thematic, taxonomic or no relation to the stimulus picture. While the

researchers found children chose fewer 'irrelevant' pictures in the presence of a real dog, there is a clear subjective element to this task and it is possible the children made connections unknown to the researchers e.g. picture colours, similar sounding names, preference for chosen picture.

None of the studies involved a sample population greater than 12 children, and approximately half of participants in each research project were identified as having severe or moderate needs with regard to language, social skills or learning. Generalising findings from such small-scale research projects, involving very young children, many of whom were known to have Special Educational Needs, to the wider school population is therefore questionable.

Lieber (2002) completed a multiple case study of two children with emotional behavioural difficulties, examining the impact of AAT on the children's behaviour and emotional states in an unpublished doctoral thesis. Interviews were completed with the children, their parents and school staff following the AAT intervention. Behaviour rating checklists were also completed by adults as pre- and post- measures.

The results of these case studies were mixed, finding little change in the children's emotional states however during interviews the children commented on their relationship with the therapy dog (Lieber, 2002). Staff with a pastoral role (e.g. counsellor, special education teacher) and parents each identified several positive changes in the children's behaviour including improvements in peer relationships, communication with others and overall behaviour. In contrast, class teachers did not report the AAT as having a significant impact on the children's behaviour.

Somervill et al. (2009) measured the physiological response of 17 schoolchildren with ADD/HD to AAA. Children's blood pressure and heart rate

were recorded at 3 five-minute intervals when interacting with a dog and without the presence of the dog. A significant increase in blood pressure was shown both during and after handling the dog. In contrast, heart rate significantly decreased after holding the dog. Somervill et al. (2009) suggest increased blood pressure indicates the dog was experienced as a positive stimulus, rather than negative or stressful, whilst the decrease in heart rate is suggested as indicative of the child's orientation toward this new stimulus, i.e. the dog. As fifteen of the children had previously or currently owned a dog, the authors think it unlikely the observed effects were due to novelty, however interacting with a live dog during school hours is a relatively novel event for most children.

#### **1.2.6 Animal Assisted Interventions and Reading**

Intermountain Therapy Animals (ITA) is one of many organisations which promote the use of AAI, aiming to "*enhance quality of life through the human-animal bond*" (Intermountain Therapy Animals, n.d.). In 1999 ITA extended the principles of AAT to children's reading and launched Reading Education Assistance Dogs (R.E.A.D.), an AAT programme in which children practice reading to a dog. R.E.A.D. was the first AAI of this type, creating a programme which used AAT dogs in a reading intervention.

On their website, ITA claim that children can become nervous when speaking or reading aloud to others and attribute stress-buffering properties to the presence of the dog during R.E.A.D. (Intermountain Therapy Animals, n.d.). There are research findings to support this assertion.

A group of researchers specifically investigated the effect of a dog's presence on children's blood pressure and heart rate during a stressful event, namely reading (Friedmann, Katcher, Thomas, Lynch, & Messent, 1983). Measures of children's blood pressure and heart rate were compared whilst reading aloud to

an adult when an unfamiliar dog was present and absent. Whilst reading, children's blood pressure and heart rate increased, suggesting this was indeed a stressful task.

As children read, the presence of the dog reduced their heart rate and blood pressure. Furthermore, the same children's resting measures of blood pressure and heart rate were lower when the dog was present. Friedmann et al. (1983) concluded that the dog's presence mediated the stressful experience of reading for children and modified their perception of the adult as less threatening.

AAE reading programmes are themselves a relatively recent phenomenon and there is a significant lack of research into this new area. While an increasing number of articles in educational magazines (e.g. Friesen, 2013; Shaw, 2013; Lane & Zavada, 2013) have enthusiastically advocated AAE reading programmes, claiming a range of benefits and citing experiential 'evidence', few are based on systematic or methodical research or include any real data:

An article by Newlin (2003) cited increases of two grade levels in reading for low achieving children paired with a reading dog, however it was unclear what constituted a grade level and no information was provided as to how this was measured nor was any data included in the article. Similarly, Bueche (2003) reported children participating in R.E.A.D. gained between two and four grade levels over a 13 month period although no further details were reported.

In a more comprehensive article, including an overview of reading research and how AAE programmes might fit with such findings, Jalongo (2005) outlined the results from an ITA study of ten children who participated in R.E.A.D.

Children's reading scores were found to have significantly improved after one year, but it is unknown how frequently and for what duration the children participated in the programme. Furthermore, although the increase was

described as significant, Jalongo (2005) neglected to state the amount of increase.

Articles such as these are repeatedly cited by AAI enthusiasts as evidence for the efficacy of animal-assisted reading programmes however such claims are misleading due to the lack of data, overreliance on anecdotal testimonies and the brevity of these reports. Fortunately, a handful of papers are now emerging, employing robust research approaches to examine the involvement of animals in children's reading.

An American study compared children's scores for reading and behaviour before and after the introduction of a class therapy dog with which children read and interacted in multiple ways (Booten, 2011). No significant difference was found in the children's pre and post scores, nor was there a significant difference when scores were compared to a control group.

In a doctoral thesis research project, a summary of which was subsequently published (Bassette & Taber-Doughty, 2013), Bassette compared the effect of a reading intervention with and without the presence of a dog on four students, aged 10-13 years, experiencing emotional and behavioural difficulties (Bassette, 2011). All four participants experienced increases in measures of their reading accuracy, fluency and comprehension and some were able to maintain these improvements for some weeks after the intervention. The presence of the dog was not found to significantly impact on reading scores however there was marginally less variance in participant scores when reading in the presence of the dog.

The most notable finding was the observed increase in motivation when the dog was present, with high levels of engagement, interest in performance feedback, evident enjoyment of stroking the dog or feeding it treats, and comparison to

family pets (for the three participants with pet dogs), seen in all of the students. Three of the four students reported they preferred reading with the dog present to reading without the dog (the fourth student reportedly enjoyed both conditions equally), and all four indicated their desire to continue reading with the dog after the completion of the intervention.

At the start of the intervention, one of the three students was a little hesitant about reading with the dog however he became more comfortable throughout the intervention and could be seen to enjoy stroking the dog and feeding her treats. This student was the youngest participant by two years and was also the only participant not to have a pet dog at home, perhaps explaining his initial uncertainty.

Bassette (2011) acknowledges the small scale of the research, together with the difference in environment for the reading conditions and the unaccredited status of the dog as limitations.

In an unpublished masters-level dissertation, Kaymen (2005) explored the potential of AAI to engage reluctant readers through a small-scale research project. Semi-structured interviews were conducted with four primary-aged children and two literacy assistants about their experiences of the AAI programme, and parents' views were collected through a questionnaire.

The children were asked to recall their experiences of participating in the AAI reading programme during the previous term, while teaching assistants were asked about children's responses to the programme. Themes emerging from the interviews and questionnaires centred around children's enjoyment of the programme due to its novelty and the positive impact of this on children's enjoyment of reading.

As a humane educator, Kaymen was professionally involved in persuading children and adults to invest in the natural world. While openly acknowledging her initial scepticism about the use of AAI to support children's reading, Kaymen (2005) details how observing a child engaging in reading to a dog substantially altered her views. As her decision to research the AAI programme immediately followed this persuasive experience, it could be suggested that Kaymen approached this research predisposed to discover positive views from those involved.

An unpublished thesis (Griess, 2010) examined the impact of reading with a therapy dog, as compared to reading with the researcher, on the reading progress of three primary-aged children with learning disabilities. In a repeated measures design, children spent two weeks reading in each condition for a total of thirteen weeks. Reading progress was assessed following each session in both conditions.

Griess (2010) initially used the Informal Reading Inventory (an informal diagnostic reading assessment) to measure children's reading comprehension, which involves increasingly complex reading passages, however this was felt to mask the progress made by children in their reading ability. The children's learning disabilities were also reported to impact on their ability to respond appropriately to comprehension questions, resulting in erratic performance. As a consequence, Griess used the amount of time children were engaged in reading in each condition to assess their progress.

Following the intervention, the children were asked to recall their experiences and comment on each reading condition. Although several positive comments were made by the children, relating to their enjoyment of reading with the therapy dog, these were not expanded upon. Griess (2010) also acknowledges



that her dual role (of reading adult and researcher) caused some confusion for the children in distinguishing reading sessions, likely due to their learning disabilities.

While statistically significant increases were found in the time children spent reading with the dog, compared to with the adult, Griess (2010) acknowledges this restricted measure of reading progress as a further limitation of the study.

In another doctoral thesis (Paradise, 2007) compared the reading performance of 117 American primary school children who were either assigned to a reading intervention with a reading therapy dog (C.A.R.E. To Read) or received individual reading instruction without a therapy dog. The Canine Assisted Reading Education (C.A.R.E. To Read) programme is a Florida based reading intervention using trained therapy dogs.

Three aspects of children's reading comprehension performance were measured before and after receiving the appropriate reading intervention: their ability to describe, identify and explain; their ability to apply, predict and summarise; and their ability to analyse and infer.

Both groups of participants demonstrated an increase in their reading skills with regard to describing, identifying and explaining a text, although the mean scores for children who had read with a therapy dog were higher in this skillset. In addition the skills of applying, predicting and summarising, as well as analysing and inferring, were higher for children who had participated in the C.A.R.E. programme, than children who had received reading instruction without a dog. Furthermore the mean scores of children who read with a therapy dog were higher in assessments of higher order thinking skills such as applying knowledge and making inferences.

In school measures of reading level, all children in the research made significant progress, likely a reflection of their regular teaching input. It is however interesting to note that the majority of children who participated in the C.A.R.E. programme also made significantly greater progress through school reading levels than children who received reading instruction without a dog. By the end of their participation in the C.A.R.E. programme, almost all children were at the reading level expected for their age group.

Paradise (2007) also collected data in relation to other academic behaviours, such as attendance and attitude to reading, through teacher questionnaires, in order to investigate the impact of the C.A.R.E. To Read programme on other aspects of children's behaviour and attitudes. Teacher responses indicated positive changes in attitudes toward reading, school work and homework, as well as a positive impact on children's self-esteem and confidence.

Paradise's research found that children who participated in an AAI intervention, namely the C.A.R.E. To Read programme, made significant improvements in their reading skills and progressed to age-expected levels of reading in school. These children also experienced increased confidence, engagement, motivation and attitude to schoolwork following their participation in the programme.

The C.A.R.E. To Read programme was founded in 2002 and is comparatively small, with only 26 primary schools in Florida running the scheme. In the UK there are currently a number of AAI programmes involving children reading to dogs including R.E.A.D. (Intermountain Therapy Animals, n.d.), Read2Dogs (Pets As Therapy, 2012), Listening Canines (Dogs Helping Kids, n.d.), and Read2Rover (Caring Canines, n.d.). Many of these programmes are also recognised and supported by the UK Kennel Club's Bark and Read Foundation (The Kennel Club, 2014).

### **1.2.7 Reading Education Assistance Dogs (R.E.A.D.)**

R.E.A.D. was introduced by Intermountain Therapy Animals (ITA) in 1999 as a library based intervention in Salt Lake City, Utah. Schemes are now run in both libraries and schools by over 3,500 teams throughout the United States, Canada and Europe (Intermountain Therapy Animals, n.d.). In a library context R.E.A.D. is an informal activity in which children can spontaneously choose to participate, matching the description of AAA.

In school settings, R.E.A.D. fits the classification of AAT as children work toward specific goals with adults documenting and recording progress. ITA emphasise the importance of an individual environment where children can develop their reading skills without criticism from peers. A typical R.E.A.D. session is described as approximately 30 minutes, with the child greeting and getting to know the dog, then reading to the dog, ending with some informal play and possibly a treat for the dog. The adult dog handler is encouraged to use the dog as a tool for asking the child about what they have read e.g. 'can you tell Jimmy what that means?' (Intermountain Therapy Animals, n.d.).

R.E.A.D. was introduced to the UK in 2009 by a handful of volunteers who attended the training in America and there are now several established R.E.A.D. programmes across the country (Intermountain Therapy Animals, n.d.). Some local authorities have embraced this creative practice and are encouraging the introduction of R.E.A.D. in primary schools.

### **1.2.8 R.E.A.D. in the Local Authority**

R.E.A.D. was introduced to the local authority in 2010 as Reading to Dogs by a volunteer and his dog, both of whom had attended the ITA training in America. Initially the scheme was delivered by the volunteer in schools across the local

authority although this ended in 2012. Some schools, keen to continue providing Reading to Dogs, made alternative arrangements, improvising with untrained volunteers and available dogs. Consequently, it is not known how many schools continue to offer Reading to Dogs within the local authority, nor how this is being delivered.

While ITA, the developers of the programme, describe R.E.A.D. as a therapeutic intervention, literature published by the local authority for schools focuses on the educational benefits. Clearly the original R.E.A.D. programme was intended to achieve therapeutic goals and would thus be categorised as an AAT intervention, however, within the local authority, Reading to Dogs is promoted as an AAE intervention addressing educational goals, albeit through targeting emotional aspects of learning to read.

It is uncertain whether schools who provide Reading to Dogs are implementing this as an AAT or AAE programme and what impact this has on both the selection of children to participate and the benefits they receive.

### **1.2.9 Summary**

In the last two decades the UK Government has introduced a number of national initiatives targeting the mechanical skills of reading, intended to raise children's attainment in reading. Statistics indicate that a large number of children continue to struggle to learn to read (Department for Education, 2014), often disliking reading and lacking confidence in their reading skills (Clark, 2014).

Research demonstrates that reading can be a stressful event (Friedmann et al., 1983) and further suggests that addressing the emotional aspects of reading could be beneficial to assist these children (Brooks, 2007).

Animals have been used to support vulnerable populations for many years.

While several authors have written enthusiastically about the benefits of AAI in various contexts, robust research in this area is still emerging. Recent developments in the field of AAI have included the use of animals to achieve educational goals.

R.E.A.D. uses dogs to support children in developing their reading skills by addressing their emotional needs. A number of local authorities in the UK have introduced R.E.A.D. however it is unclear how R.E.A.D. is currently working within the local authority area and there appears to have been no systematic attempt to audit practice.

### **1.3 Theoretical Frameworks for Reading to Dogs**

While ITA asserts that R.E.A.D. is an AAT intervention which helps children to relax and enjoy reading (Intermountain Therapy Animals, n.d.), no theoretical explanations have been proposed for AAI in specific relation to Reading to Dogs. Based on the researcher's own knowledge of psychology, however, some theoretical approaches could be useful in understanding Reading to Dogs.

Many authors have written about the close bond formed between humans and their companion animals (i.e. pets) (Fine, 2010; Serpell, 1986). Attachment theory (Bowlby, 1969) discusses the development of secure emotional relationships between an infant or child and their primary caregiver. Elements of attachment theory could arguably be applied to describe relationships between humans and companion animals. It is, however, unclear whether the relationship between an AAT reading dog and child would differ from a companion animal, and if so to what extent.

As previously mentioned, researchers have noted that children can experience reading as a stressful event (Thomas, et al., 1984) and found that the presence of a dog can reduce physiological responses to stress (Friedmann, Katcher, Thomas, Lynch, & Messent, 1983). Whilst this biological calming effect could assist children during a Reading to Dogs session, it is not clear how this occurs.

Psychodynamic models discuss the projection of undesirable emotions onto animals through the anthropomorphism of animals. Levinson (1997) repeatedly refers to young children using his dog to safely express their own thoughts and feelings in the context of psychotherapy sessions, i.e. "Jingles says..." The presence of a dog whilst reading could conceivably provide children with an external being onto which they can project their anxieties.

Positive psychology is another field which could contribute to our understanding of AAI generally and Reading to Dogs more particularly. The AAI literature is filled with references to the positive emotions that animals can elicit (Fine, 2010). Reading interventions deliberately targeting children's self-esteem have been shown to have potential (Brooks, 2007). It is therefore reasonable to propose that Reading to Dogs could foster positive emotional states in children, supporting the development of their reading.

## **1.4 The Present Research**

### **1.4.1 Research Rationale**

Within the UK and America, animals permeate children's lives through decorative insignia on clothing and personal possessions, characters in stories and of course, pets (Melson and Fine, 2010). Serpell (1999) argues the need to acknowledge the significance children and young people place on animals, responding to resistance to research in child-animal relations with the assertion:

*“If interactions with animals are as attractive and important to children as they appear to be, then it is the height of adult arrogance to assume that child-animal relations are somehow irrelevant.”*

*(Serpell, 2010, p. 92)*

An internet posting on an Educational Psychology forum in 2011 generated several responses including requests for more information about the theoretical and evidence base for AAI (Davison, 2011). Graham (1999, cited in Nathanson, 2007) believes the number of AAI programmes will inevitably increase over time. The practice of AAI programmes within the UK is becoming more widespread (Society for Companion Animal Studies, 2010) with increasing numbers of schools introducing AAE interventions.

The present research project is situated in a large rural local authority in England, comprising twelve smaller boroughs. A volunteer from a charitable organisation previously provided the Reading to Dogs programme in a number of schools within the local authority however it is not known how many schools were running the Reading to Dogs programme or how children were experiencing its benefits.

This research aimed to uncover current practice and implementation of one AAT intervention and to develop a theoretical understanding of children’s experiences of this programme.

As previously outlined, there is no consensus on a theoretical approach to explain Reading to Dogs, nor is there a clear description of the mechanisms at work in such an intervention.

While a substantial amount of published material exists on AAI, much of this consists of opinion pieces and anecdotal reports, and robust research into the area is scant (Palley, O’Rourke, & Niemi, 2010). Many advocates of AAI, especially AAT programmes, are animal enthusiasts and pet owners

themselves (Fine, 2010). Several authors move from critical discussions of research findings and theoretical perspectives, to emotional appeals for greater consideration of animal welfare and environmental issues.

In his book 'pet-oriented child psychotherapy' Levinson describes his dog as a 'co-therapist' and expands his ideas about the importance of interactions with animals, attributing many of emotional disorders to society's disconnection with the natural world (Levinson, 1997).

Others neglect to acknowledge their personal investment in the success of a programme; for example, while the class teacher in Bassette's (2011) study was reportedly impressed by students' increases in motivation following reading with a dog, Bassette carefully points out the teacher's pre-existing belief in the benefits of children becoming familiar with animals and comments that the dog used in the intervention belonged to the teacher.

#### **1.4.2 Researcher's Position**

I first became aware of AAI when a regional news bulletin in 2010 showed coverage of an animal-assisted intervention whereby primary school children within the local authority were encouraged to read to dogs as a school based intervention (BBC News, 2010). I was immediately curious to examine the evidence base and theoretical rationale for such an approach, and my interest in AAI was further fuelled upon discovering the apparent lack of robust literature in this area.

I consider myself to be interested in animals and have previously owned a variety of domestic pets. Despite enjoying the company of animals, I remain sceptical about the use of animals to facilitate children's learning generally, and reading specifically. As a previous class teacher I feel passionate about



ensuring that children enjoy the experience of learning. In addition, I have found positive psychology to be very useful as both a framework for understanding and tool for facilitating positive change in my own work as a psychologist.

In conducting this research I intend to simply explore current practice and children's perspectives of the Reading to Dogs programme in order to add to the knowledge base and understanding of AAI.

I am currently employed as a Trainee Educational Psychologist within the local authority Educational Psychology Service (EPS) in which this research is situated. I am not personally involved in the Reading to Dogs programme. The EPS, while supportive of my research thesis, has no involvement in the Reading to Dogs programme and no investment in its success or any lack thereof.

#### **1.4.3 Research Aims**

The purpose of this research is to explore current practice of the Reading to Dogs programme in primary schools in the local authority and to develop a theoretical explanation of this phenomenon. More specifically, the main aims of this research are:

- To audit current practice with regard to the Reading to Dogs programme in primary schools within the local authority.
- To generate a grounded substantive theory of the Reading to Dogs programme.

## **2. Methodology**

### **2.1 Purpose of Research**

The present research concerns an investigation of the Reading to Dogs programme, as delivered in primary schools within the local authority.

As outlined in Chapter One, current research into this area is limited, with few researchers employing a robust methodology. Given the emergent nature of this research area, the present research is exploratory.

Very little is known with regard to current deployment of the Reading to Dogs programme within the local authority. Intermountain Therapy Animals (ITA) who originally developed the programme, based Reading to Dogs on a therapeutic approach, highlighting the emotional aspects of learning to read and implying therapeutic goals. Literature published by the local authority however presents Reading to Dogs as an intervention with educational goals, i.e. to raise primary children's reading attainment. There is currently no consensus with regard to an explanation of what may be helpful about AAI in general, or Reading to Dogs in particular.

The first purpose of this research is to explore how the Reading to Dogs programme is being used in schools. An audit of current practice will establish the number of schools running the programme, the intended focus of the programme (i.e. therapeutic, educational) as well as details of how the programme is administered within the school.

The second purpose of this research is to generate a theoretical explanation of Reading to Dogs. Data from the audit, as well as individual interviews with children who have participated in the programme and relevant literature will be

examined using a grounded theory methodology to advance our understanding of why children may find the programme helpful.

### **2.1.1 Research Aims**

As stated in Chapter One, the aims of this research are:

- To audit current practice with regard to the Reading to Dogs programme in primary schools within the local authority.
- To generate a grounded substantive theory of the Reading to Dogs programme.

## **2.2 Research Philosophy**

The particular philosophical stance adopted by the researcher reflects my beliefs about the nature of reality and knowledge, which in turn affects the approach and design of the research that I deemed appropriate to investigate this particular phenomenon.

The philosophical paradigms outlined present fundamentally different perspectives on this topic, with significant implications for applicable research methods and design. The various conceptualisations of this research are briefly explored, together with an explanation of the philosophical stance adopted in the present research.

Before any research activity could be planned I had to first consider my ontological stance; that is, my belief about the nature of reality. Epistemology relates to the nature of knowledge and how things can be 'known'. In this research, how things may be known and the 'truth' of such information is dependent on my ontological position (i.e. my beliefs about reality).

### **2.2.1 Positivist Paradigm**

Scientists traditionally adopted a positivist stance in which an objective, measurable and single reality is said to exist (Robson, 2002). Research conducted within a positivist paradigm emphasises validity and reliability to discover 'truth'. The existence of an objective reality necessitates the requirement for researchers to remain objective and unbiased, controlling for external influences, in order to obtain the same findings as any other researcher measuring the same reality (Penn, 2008). Positivism has been subject to much criticism in this regard, with post-positivism arising as an alternative which recognises that the experiences and knowledge of the researcher will influence their observations of reality (Robson, 2002).

The Reading to Dogs programme would be conceptualised as an objective entity, existing outside individual experience, experienced and understood the same by everyone (Robson, 2002). This distinction between reality and the individual is fundamental to the positivist perspective, with objective facts and empirical data highly valued.

Research into the Reading to Dogs programme within a positivist paradigm would likely adopt an experimental approach and collect quantitative data, for example measuring the impact of the programme on aspects of children's attainment or conducting randomised control trials.

As outlined in the previous chapter, it is unclear both what specific benefits children gain from participation in Reading to Dogs, and how the programme is currently run in schools. Given the lack of supervision or central management of the programme, it is highly likely current practice varies between individual schools. The assumption that all children's experiences of Reading to Dogs are the same is therefore unhelpful. Furthermore the lack of consensus regarding

the theoretical basis for AAI generally, and Reading to Dogs specifically, warrants a more detailed exploration of individual experiences of this phenomenon.

### **2.2.2 Constructionist Paradigm**

In recent years, constructionist and relativist paradigms have argued against a single reality, asserting that reality is subjective and consequently multiple, simultaneous realities exist (Kelly, 2008). The social constructionist paradigm describes the creation of reality through interactions between people, each ascribing their own and shared meanings to the experience (Creswell, 2009).

Adhering to constructionism's assertion that reality is subjective, rather than attempting to uncover 'facts' research focusses on exploring individual perceptions of reality, as each individual experiences their own 'truth' (Robson, 2002). This paradigm views the researcher as inextricably linked to the research area, co-constructing reality and meaning through their research:

*"There is, then, no distinction between 'subject' and 'object', or 'knower' and 'known'"*

*(Hibberd, 2005, p.76)*

The constructionist conceptualisation of the Reading to Dogs programme is starkly different from the positivist, with numerous factors interacting to create an experience unique to each individual. Radical constructionists go as far as to assert there is no reality outside human consciousness (Robson, 2002).

Research within this paradigm would stress a range of experiences and acknowledge the significance of context, with each child's experience of the programme unique to them, dependent upon a range of factors. While supporting the idea of individual constructions around Reading to Dogs, the researcher also believes some shared understanding of these concepts must

exist, with an objective reality outside human consciousness (Brewer & Hunter, 2006).

The application of a constructionist stance to researching Reading to Dogs would require a non-experimental and purely qualitative approach, for example in depth interviews or case studies. Such an approach would capture the rich detail of individual children's experiences however the field of AAI has been widely criticised for its overreliance on case studies and often anecdotal reports.

### **2.2.3 Critical Realist Paradigm**

The critical realist paradigm finds a middle ground between these perspectives, positing the existence of an objective reality in which an individual's experiences are constructed and mediated by their chronological, cultural, social and contextual environment (Sayer, 2000).

Reality is seen by critical realism as a combination of objective, natural entities and subjective, social constructs, all embedded in context (Kelly & Woolfson, 2008). Knowledge is therefore considered in terms of explanations of mechanisms and processes affecting observed events (Sayer, 2000).

Experimental techniques can be used to investigate definite natural entities however exploring social concepts requires an approach that acknowledges the interactive link between researcher and researched (Robson, 2002). Tailoring research approaches to the topic being studied in this way could be considered pragmatic however this should not be confused with pragmatism.

As previously mentioned, critical realism is positioned between the two previous perspectives, recognising reality as complex and diverse yet acknowledging that elements of the world must exist independently from our perception of them (Sayer, 2000). Working within a critical realist framework, research would

explore the interaction between 'real' objects (e.g. the child, dog and, if applicable, adult volunteer) and contextual factors (e.g. school setting, child's age, dog behaviours) to identify the mechanisms affecting behaviour and outcomes in the Reading to Dogs programme (Brewer & Hunter, 2006).

Critical realism is argued to be the most appropriate paradigm for the work of Educational Psychologists (Kelly, 2008), combining an efficacious and robust research approach with a recognition of the complex realities in which children live (Mertens, 2010). Furthermore, given the lack of an agreed theoretical framework, focussing on the mechanisms underpinning interactions in the Reading to Dogs programme would also contribute to the existing understanding and knowledge base of AAI.

Processes and mechanisms identified as supporting positive outcomes can also be shared with schools, professionals and children. In this way, critical realism has the capacity to be an emancipatory paradigm, empowering vulnerable groups (Dickson-Swift, James, & Liamputtong, 2008).

#### **2.2.4 Pragmatism**

An interesting alternative to this debate is provided in the form of pragmatism, which claims such philosophical postulations as those outlined above are unproductive and instead researchers should focus on the suitability of particular approaches to a given research issue (Robson, 2002).

Pragmatism shares many common principles with critical realism, recognising the importance of both the objective physical world, subjective social constructs and inner human experiences. Pragmatism however rejects mainstream bipolar constructs of research (e.g. facts or values, rationalism or empiricism), arguing that the adoption of a philosophical position is less important than the

suitability of a particular approach (Robson, 2002). Regarding these philosophical deliberations, as Rorty (1983, p.xiv, cited Creswell, 2009) summarises, pragmatists “would simply like to change the subject”.

Pragmatism explains that we ascribe something as true by creating rules for ‘truth’ and labelling it as such:

*“The reasons why we call things true is the reason why they ARE true, for ‘to be true’ MEANS only to perform this marriage-function.”*

*(James, 2013).*

The practical use and application of a particular ‘truth’ or theory determines its value in pragmatism. Ideas are only relevant so far as they are useful; just as perspectives and knowledge change with time, so do values and principles.

Pragmatism acknowledges the evolving nature of reality, encouraging researchers to embrace a more fluid approach.

Pragmatism inverts traditional philosophical debates of research, suggesting that predetermining the ‘best’ approach for a particular piece of research based upon a philosophical stance and independent of the actual aim or question the research intends to address is inappropriate. Mertens (2002, cited Robson, 2002) warns against completely ignoring philosophical paradigms with regard to research, cautioning such actions could lead to the researcher inadvertently adopting others’ values (e.g. research commissioners or stakeholders) and thus influence the research.

Pragmatism argues that research should be designed for purpose and effectiveness, rather than on the basis of philosophical reasoning. Research within this paradigm commonly adopts an eclectic approach to address research problems (Creswell, 2009). Teddlies (2005, cited Robson, 2002)



argues such an approach to research reflects the reality of many real-world research studies.

While the ontological stance adopted in the present research is congruent with both the critical realist and pragmatic paradigms, the approach adopted here is a pragmatic one as the research design was developed in order to best address the research aims rather than to match a philosophical standpoint.

Robson (2002) claims that pragmatists often have an outcome in mind and therefore select whichever methods will best achieve this. The researcher recognises a further aspiration for this research beyond the research aims, namely to establish some theoretical understanding or framework for the Reading to Dogs programme. The present research has therefore been deliberately designed to facilitate attainment of this outcome.

## 2.3 Research Design

This is a sequential, two phase, mixed methods project. The sequence and weighting of each element of the two research phases are presented in Figure 2.3.

The first phase gathered quantitative data via structured telephone interviews and anonymised tracking data, to audit current practice in schools.

The second phase employed a grounded theory methodology to generate a substantive theory of Reading to Dogs.

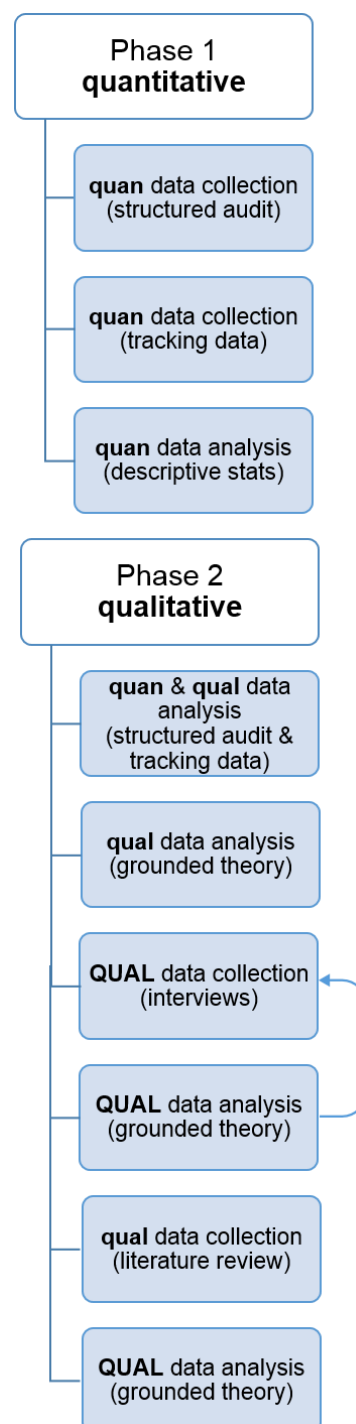
Quantitative and qualitative data collected from schools during the audit, qualitative data from individual interviews with children who have experienced the Reading to Dogs programme, and relevant literature on theoretical concepts were all analysed using the grounded theory constant comparative method (Glaser & Strauss, 2008).

The first and second phases of the research were analysed and discussed separately.

In order to address the two research aims, a mixed methods research design was adopted.

Robson (2002) argues that the debate regarding the relative benefits of quantitative and qualitative research designs was resolved some decades

Figure 2.3: Graphical representation of sequence and weighting of research



previously and a mixed methods research design is now generally agreed as the best approach.

The initial aim of this research was to audit current practice of Reading to Dogs in the local authority. The quantitative survey also provided simple demographic and logistical information regarding how the Reading to Dogs programme is currently employed in schools.

Pragmatism acknowledges that aspects of the natural world exist outside individual experience and can therefore be quantitatively measured. In this instance the researcher was interested in obtaining basic factual data regarding the number of schools and children involved, the duration of programme sessions, and the reading progress made by the children.

The second aim of this research was to generate a grounded substantive theory of the Reading to Dogs programme. A combination of data from individual interviews with children, existing literature on relevant concepts and data gathered during the first phase of the research was analysed using a grounded theory methodology.

As well as an external physical world, pragmatism recognises the existence of inner worlds where experience is individual and unique. Conducting qualitative interviews with children about their experiences of the Reading to Dogs programme, in conjunction with analysis of data shared from schools and themes from existing relevant literature, arguably generated richer data than any single investigation alone, and identified areas of impact or helpful features that might otherwise be omitted.

A sequential design was necessary as the quantitative audit served to determine which schools were currently running the Reading to Dogs

programme and therefore identify potential participants for the qualitative interviews.

The second, primarily qualitative phase received a greater weighting in this research as the quantitative audit in phase one gathered data specific to the local authority however the substantive theory generated in this research was applicable to Reading to Dogs more generally and could even have implications for understanding of other AAls.

Analyses of the data gathered in each phase of the research were conducted separately, in accordance with chronological necessity, and are therefore discussed separately.

### **2.3.1 Grounded Theory Methodology**

The second phase of the research employed a grounded theory methodology developed by Glaser and Strauss in 1967. Grounded theory provided researchers with an alternative to the era's prevailing paradigm of positivism and verifying existing theoretical explanations, by inductively generating theory from data (Glaser & Strauss, 2008).

Many researchers have since adapted the basic principles of grounded theory to suit their individual philosophical perspectives on research, for example constructionist grounded theory (Charmaz, 2014) and qualitative data analysis (Strauss & Corbin, 1994). Glaser has vehemently dismissed these as new methods, asserting that only the original approach remains true to the intention of grounded theory as a whole research methodology, not simply a tool of analysis (Glaser, 2008).

The present research adheres to the approach originally described by Glaser and Strauss and subsequently elaborated upon by Glaser, often referred to as

classic grounded theory (Glaser, 2012). Glaser defines classic grounded theory as:

*“A general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area”*

*(Glaser, 1992, p. 16)*

Grounded theory involves concurrent data collection and analysis, with the researcher constantly comparing analytical categories and seeking new sources of data to elaborate emerging theoretical concepts (Glaser & Strauss, 2008). Furthermore, Glaser’s writing on grounded theory techniques and strategies encourages researchers to pursue whichever data sources are pertinent and appropriate to the research (Glaser, 2014). This emphasis on suitability of data and using ‘what works’ is a key aspect of grounded theory methodology.

Grounded theory is seen as transcending traditional research paradigms, focussing on collecting relevant data to develop theoretical abstractions. Holton (2008) presents a detailed discussion of grounded theory’s relationship to various paradigms, concluding:

*“Viewed as a general research methodology, GT is not confined to any particular epistemological or ontological perspective; rather, it can facilitate any philosophical perspective as embraced by the researcher.”*

*(Holton, 2008, p. 69)*

Pragmatism positions theories as sets of ideas expressing current understanding of certain phenomena, which may change, rather than as factual explanations (James, 2013). Glaser emphasises that the purpose of grounded theory is to not to present ‘facts’, rather to generate a theoretical explanation of a given substantive area:

*“The result of a grounded theory study is not the reporting of facts but the generation of probability statements about the relationships between concepts – a set of conceptual hypotheses developed from empirical data”*

*(Glaser, 1998, p. 3)*

Both in terms of pursuing data on the basis of suitability and appropriateness, and with regard to transcending philosophical debates, grounded theory clearly fits with the pragmatic stance adopted in this research.

In their original work, Glaser and Strauss advocated the inclusion of both quantitative and qualitative data sources into a grounded theory approach (Glaser & Strauss, 2008). Glaser has since written widely on the use of a range of data sources in grounded theory, with his mantra of “all is data” explicating how all sources of data are accepted into grounded theory, adding rich opportunities to saturate the researcher’s theoretical categories (Glaser, 2007). The combination of quantitative and qualitative data collected in this research is therefore fitting with a grounded theory methodology.

The present research involves a sequential, two phase design. While the initial audit conducted with schools is presented as a distinct and separate phase, both quantitative and qualitative data generated in this phase of the research was incorporated into the second phase, congruent with the grounded theory methodology adopted here.

The first phase of this research aimed to specifically discover current practice regarding the Reading to Dogs programme within the local authority. The aim of the second phase of this research meanwhile was more broadly phrased, intending to explore the Reading to Dogs programme and develop a theoretical explanation. By assuming a grounded theory methodological approach it was not possible to predict the specific outcome of this phase of the research: while

other research methodologies require a distinct research question to investigate, grounded theory encourages the researcher to remain open to pursuing different directions of enquiry, based on the categories emerging from the data (Willig, 2013).

With such distinct aims for each phase of the research, collapsing the results from the first phase of the research into the second grounded theory phase would both conceal the main findings of the audit, and distort the focus and approach of the grounded theory methodology. It was therefore deemed appropriate to separate the phases of the research, in order to best meet the two aims of this research.

With grounded theory it is important that the researcher does not conduct a thorough examination of the literature in advance of completing the research and so potentially preconceive conceptual categories before they emerge from the data. Nonetheless, Glaser recognises that researchers necessarily begin a research project with some existing knowledge of the field.

*“Keep in mind that preconceived concepts do not have to be forgotten. They are just to be suspended for the GT research so the researcher is open to the emergent.”*

*(Glaser, 2012, p. 4)*

In the present research, an initial review of existing literature in the field of AAI was carried out prior to commencing the research and is presented in the first chapter of this thesis. This was deemed appropriate for several reasons: it provided an overview of the general research area thus contextualising the research; it allowed the researcher to acknowledge their existing knowledge and potential preconceptions regarding AAI; and it highlighted the lack of robust research into AAI generally and AAI reading programmes specifically, thereby demonstrating the need for the current research.

## 2.4 Phase 1: Audit of current practice

### 2.4.1 Phase 1: Research Design

The first phase was a quantitative audit of schools' present practice (see Figure 2.4.1). At the time very little was known about the delivery of the Reading to Dogs programme within the local authority. It was therefore beneficial to initially conduct an audit of current practice and implementation of the programme.

The purpose of this audit was to provide information on four areas of current practice:

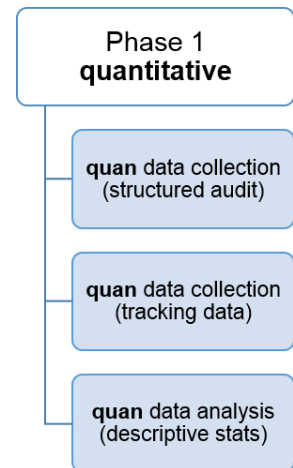
- Background to the programme (e.g. current uptake, number of children involved)
- Operation of the programme (e.g. selection criteria used by schools, reading ability of participating children, frequency and duration of programme)
- Behaviour in programme sessions (i.e. which behaviours do children, adults and animals engage in during a typical session?)
- Impact of the programme (e.g. anticipated impact, use of tracking measures)

The audit served to identify the research population, as well as identify specific children who had experienced the programme and could be interviewed in the second phase of the research.

### 2.4.2 Phase 1: Participants

From a list of twenty-six primary schools known to have expressed an interest in Reading to Dogs (as identified by a volunteer previously delivering the

*Figure 2.4.1: Graphical representation of sequence and weighting of phase 1 research elements*





programme), nineteen schools confirmed they currently were or had previously delivered the Reading to Dogs programme (see Appendix 2). These nineteen schools formed the sample for Phase 1 of this research.

Inclusion criteria for schools' participation in Phase 1 of this research were local authority schools who had previously, or were currently, running the Reading to Dogs programme in their school.

Although a snowball technique was used in order to include any other primary schools running the programme (i.e. asking participant schools to identify other potential participants), no further schools than the original nineteen were identified.

All of the nineteen primary schools agreed to participate in the research and all responded to the structured telephone interviews.

Of the nineteen primary schools, sixteen reported tracking children's reading progress (or other aspects of their development) in relation to their participation in the Reading to Dogs programme. Thirteen schools agreed to share anonymised copies of this data however only three schools responded to the request for anonymised measures of children's progress.

#### **2.4.3 Phase 1: Data Collection**

A structured interview schedule comprising 16 items was constructed by the researcher to audit schools' current practice and implementation of the Reading to Dogs programme. An electronic copy of the interview schedule was shared with participants in advance to both facilitate obtaining informed consent and ensure they had all necessary data to hand for the interview. The full interview schedule is included as Appendix 4 to this thesis. The structured interview format required participants to select from a list of predetermined responses

although each question also had the option of 'other' to allow for unanticipated categories.

Following receipt of the interview schedule, schools were contacted by telephone to confirm their participation in the research and arrange a telephone interview with the researcher. Interviews were conducted by the researcher on the telephone at prearranged times with individual schools, following the structured interview schedule. Administering the structured interviews by telephone allowed for expedient data collection and significantly reduced the likelihood of non-responses.

As part of the audit, schools were asked what, if any, data they had collected with regard to children's reading progress or other skills. Where relevant, anonymous copies of this data were requested (see Appendix 5) and then collated and analysed by the researcher. An example proforma, provided for schools to complete and submit, is included as Appendix 6 to this thesis.

#### **2.4.4 Phase 1: Data Analysis**

The structured telephone interviews generated quantitative data relating to demographic and logistical features of current practice regarding the Reading to Dogs programme in local authority primary schools. Anonymised school responses to each question of the telephone interview were inputted into a database and analysed using descriptive statistics.

Independent of this research, schools had a variety of in-school assessment tools to measure children's reading progress. These measures included national curriculum levels, British Ability Scales 3 (BAS 3) subtests, York Assessment of Reading Comprehension (YARC) and school reading levels.

In addition to the structured interviews, three sets of anonymised data (totalling 89 children) relating to children's reading progress and academic or emotional development following the programme were also collected. These data sets were subjected to descriptive statistics.

It is unclear under what circumstances the assessments were completed and the level of skill with which they were administered. Nonetheless the independent collection and use of this data by schools in everyday practice to demonstrate the impact of the Reading to Dogs scheme provides an ecological validity to these scores. Furthermore, exploration and analysis of this data provides some insight into current practice of schools.

#### **2.4.5 Phase 1: Ethical Considerations**

The British Psychological Society (The British Psychological Society, 2010) has published ethical guidelines for research with human participants. Informed by these guidelines, the following section outlines how various ethical issues were addressed in the research project.

A detailed application for ethical approval, together with relevant supporting documentation, was approved by the University of East London before initial contact with prospective participants.

##### **2.4.5.1 Phase 1: Informed Consent**

All schools contacted received an information sheet which outlined relevant details of the research in simple accessible language, as well as a copy of the interview schedule for the telephone audit. A copy of the research information sheet is provided in Appendix 3 of this thesis.

Providing schools with the structured interview schedule prior to the interview ensured staff were fully informed as to the questions they would be asked during the interview.

All schools received a follow-up telephone call to confirm that they wished to participate and establish informed consent. Schools independently identified the member of staff most appropriate to answer questions about the Reading to Dogs programme (e.g. SENCo, Head of Literacy). This staff member provided consent for participation in the research.

At the end of each telephone interview, schools who reported they had tracked some aspect of children's progress in relation to the Reading to Dogs programme were asked if they would consider sharing an anonymised copy of this data with the researcher. Schools who agreed received a follow-up email including an explanation of the request for anonymised data and information regarding how this data would be used. Schools were also provided electronic proformas in which to submit this data.

#### 2.4.5.2 Phase 1: Withdrawal

As part of obtaining informed consent, all participants were clearly informed of their rights to: a) choose not to provide some or any information requested by the researcher, b) withdraw from the research at any time in the data collection phase, and c) have their data removed from the research and destroyed, at any time in the data collection phase. No participants elected to withdraw from the research.

#### 2.4.5.3 Phase 1: Anonymity & Confidentiality

In the interests of confidentiality, neither the geographical area nor the local authority have been identified and are referred to in all reports as 'the local

authority'. In addition, all schools were allocated a pseudonym (e.g. 'School A'), with contact details of individual staff members kept separately from school data. All data was anonymised and kept securely.

Where tracked data for individual children was obtained from schools, this was anonymised by schools before being shared with the researcher.

## 2.5 Phase 2: Grounded Theory Induction

### 2.5.1. Phase 2: Research Design

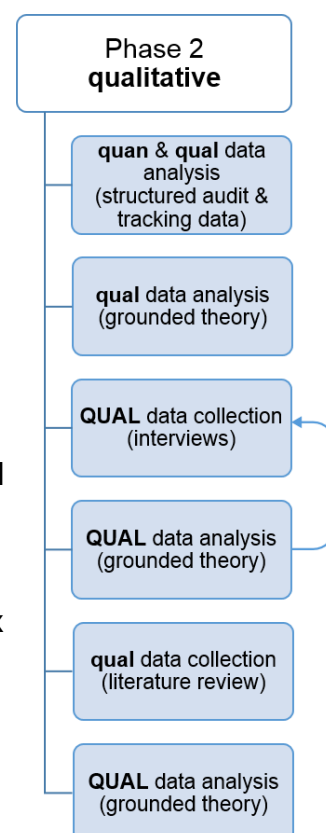
The second, essentially qualitative phase of the research employed a grounded theory methodology to generate a substantive theory of the Reading to Dogs programme.

As outlined in the introduction to this thesis, AAI is an emerging area with an extremely limited body of published research relating to its use as a reading intervention for children. Furthermore, no theoretical explanation of Reading to Dogs has been previously developed. The purpose of this phase of the research was to explore Reading to Dogs within the local authority and develop a theory in this substantive area.

Quantitative and qualitative data collected in phase 1 served as the initial data (see Figure 2.5.1) and was subjected to open coding.

Individual semi-structured interviews were subsequently carried out with children who had completed the Reading to Dogs programme. These interviews explored children's experiences of the programme and developed upon emerging conceptual categories identified through concurrent analysis. Interviews were individually transcribed (see Appendix 10) and analysed in accordance with the constant comparative method. Each stage of analysis guided questions for the next interview.

*Figure 2.5.1: Graphical representation of sequence and weighting of phase 2 research elements*



Finally, an examination of literature relevant to the identified theoretical concepts was conducted and pertinent ideas incorporated into memos.

### **2.5.2 Phase 2: Interview Participants**

Ten primary school children who had participated in the Reading to Dogs programme and were identified by schools as having found the programme beneficial were interviewed about their experiences. These children attended one of five primary schools from within the local authority that had participated in the first phase of this research.

The ages of the children ranged from Year 1 (aged 5-6 years old) to Year 6 (aged 10-11 years old). All of the children were from white, British families and spoke English as a first language. None of the children were identified as having any special additional needs.

Inclusion criteria for children participating in Phase 2 of this research were children to have participated in the Reading to Dogs programme at their school.

### **2.5.3 Phase 2: Interview Procedure**

At the end of the structured telephone audit interviews conducted in the first phase of the research, five schools agreed to participate in the second phase of the research project. The schools were contacted by email and asked to each identify two children who had benefited from their participation in the Reading to Dogs programme and would be interested in talking about their experiences. A copy of this email is included in Appendix 7 to this thesis. These children were invited to participate in individual semi-structured interviews exploring their experiences.

Schools received a participant invitation letter to share with prospective participants and their parents, which outlined the research project and the

interview process in accessible language. A consent form, to be signed by both children and parents, was also included in the email. Copies of the participant invitation letter and consent form are included as Appendices 8 and 9 respectively, to this thesis.

Once schools confirmed receipt of the signed consent forms, interviews were arranged to take place in the children's schools and consent forms were collected from school staff upon the researcher's arrival. Schools were asked to provide a quiet space within the school for the researcher to meet with each of the two children individually.

For practical reasons relating to time constraints both on the part of the researcher and schools, interviews were arranged in pairs at each school. Interviews lasted between 20 and 40 minutes and were conducted consecutively, with a break of approximately 20 minutes between the two interviews for the researcher to reflect and make notes on concepts arising and points to explore in subsequent interviews.

At the start of the interview the researcher introduced themselves to the child, explained who they were, outlined the research project and explained the interview process, including what would happen to the information shared in the interview and the child's right to withdraw. The researcher then invited the child to ask any questions they might have, confirmed that the child was still happy to participate in the interview and, following confirmation, the interview began. In the fifth interview, Eric stated he would answer a set number of questions and the interview lasted only four minutes as a result.

At the end of the researcher's questions, children were once again invited to ask any questions they might have. Following this the interview was drawn to a



close. The researcher then spent approximately 20 minutes reflecting on the interview and making additional field notes.

Field notes are seen by many as better suited to grounded theory than interview transcripts, capturing conceptual ideas in the moment (e.g. (Charmaz, 2008) (Holton, 2008). Glaser further asserts that transcribing interviews is an unnecessary use of time, slowing the researcher down and preventing them from immediately beginning coding (Glaser, 2012).

As a novice researcher, developing interviewing and note-taking skills, a combination of field notes during interviews, reflective memos created immediately after the interviews and transcriptions of digital recordings of the interviews, was felt to be most appropriate in the present research.

All interviews were recorded using an Olympus digital dictaphone. The entire conversation outlined above (i.e. including the explanation of research and gaining consent) was also frequently recorded using the dictaphone however transcription only began from the start of the first interview question. Following each pair of interviews the audio files were downloaded and transcribed by the researcher, then subjected to coding and analysis.

By transcribing interviews the same day, coding and analysing the interview data was able to begin almost instantly. Field notes and reflective memos generated on site also captured immediate conceptual ideas from interviews as they emerged.

#### **2.5.4 Phase 2: Data Collection & Analysis**

Analysis and collection of data are inextricably linked in classic grounded theory. This is an inductive methodological approach in which concurrent data

collection and constant comparative analysis are used to generate an abstract theoretical explanation of the data (Glaser & Strauss, 2008).

Glaser and Strauss (2008) describe constant comparative analysis as a reiterative, sequential process in which the analysis transitions gradually from one phase to the next, while earlier stages of constant comparative analysis continue to be used simultaneously throughout the entire analysis, informing and developing subsequent stages, until the theory is generated and analysis ceases (Glaser & Strauss, 2008).

The key phases of constant comparative analysis are: open coding to identify initial categories, theoretical sampling to pursue data which will complete conceptual categories and extend the theory, memo writing to capture the researcher's emerging conceptual ideas, integrating theoretical and conceptual categories to delimit the theory, and writing up the theory from sorted memos (Glaser, 2012).

#### 2.5.4.1 Open Coding

At the start of grounded theory research, collected data is subjected to open coding, whereby the researcher codes data into as many categories as emerge. It is important that the researcher remain open and sensitive to the emerging categories throughout grounded theory, rather than impose preconceived categories.

School responses to the structured telephone audit and anonymised reading scores shared by schools in phase one of this research were analysed using open coding to identify initial categories. Three schools had also independently collected qualitative comments from sixteen children, who participated in the Reading to Dogs programme, and twenty parents. Anonymised copies of these

comments were shared with the researcher and analysed using open coding. The first two individual child interviews were also transcribed and analysed, line by line, using open coding. A copy of an annotated transcript is provided in Appendix 11 to this thesis to demonstrate open coding.

Each new incident coded into an existing category was compared to existing incidences within the same category, to begin developing the theoretical properties of the category. This comparison of new data to previously coded data is a central aspect of constant comparative analysis, ensuring the categories represent the emerging data and identifying gaps within categories for the researcher to investigate in subsequent data collection.

‘Being listened to’ quickly emerged as a category following initial analysis. Open coding of School F survey responses identified several incidences coded into this category, including:

*He just listened all the way through*

*(School F, survey responses, line 41)*

*Dog\* sat and listened, he didn’t interfere with my reading.*

*(School F, survey responses, lines 68-69)*

*It feels like he’s listening, he doesn’t bark like other dogs.*

*(School F, survey responses, line 85)*

Although all of these statements relate to the dog listening to the child read, they each identify a different property of this category, from continuous listening (i.e. all the way through), to listening without interference, to behaviours which demonstrate listening.

Open coding of interviews with Adam and Ben identified additional properties of this category, such as the dog listening without reacting to mistakes:

*Adam: 'cos I get frustrated every time if I get anything wrong, like, with um, my parents or teacher or friends, with a dog it will still listen, doesn't really care, and I kind of improve a bit more*  
(lines 41-42)

And giving focussed attention:

*Ben: Um... The dogs, they just sit there. Be still. They don't need to go on the computer or just like, email someone, saying "I gotta do this job, I gotta do this job" like that.*  
(Ben, lines 47-49)

#### 2.5.4.2 Theoretical Sampling

At the start of grounded theory research, Glaser emphatically advises against preconceived interview questions, instead encouraging researchers to use open-ended questions (Glaser, 2012). Open-ended questions, designed to allow participants to elaborate on their main concerns, were therefore used both to begin interviews and introduce new areas of enquiry i.e.

*Researcher: Can you tell me a bit about reading with \*dog\*?*  
(Adam, line 1)

*Researcher: So tell me about reading then.*  
(Claire, line 221-222)

As the research develops, researchers employ theoretical sampling to allow emergent categories to identify new lines of enquiry and emergent questions. Glaser and Strauss (2008) describe the process of theoretical sampling in grounded theory, whereby analysis of data generates questions to guide the collection of new data in order to clarify the properties of conceptual and theoretical categories as they emerge from analysis.

Interview questions were guided by theoretical sampling using emergent codes, initially identified through grounded theory analysis of the data collected in phase one of this research, and subsequently through analysis of individual interviews. For example, 'reading to other animals' emerged as an initial code

from several schools' responses to the phase one audit. During the first interview I asked Adam about this:

*Researcher:       Ok. Do you think it matters that \*dog\*'s a dog? D'you think it'd work so well if he wasn't a dog?*

*(Adam, lines 176-177)*

Theoretical sampling both directs the data the researcher pursues (i.e. specific questions to clarify theoretical properties of emerging conceptual categories) and guides the researcher toward particular sources likely to yield appropriate data (e.g. individual interviews, published research).

Glaser's maxim of 'all is data' includes existing theoretical frameworks and previous research, emphatically encouraging researchers to incorporate relevant literature as additional data for comparative analysis (Glaser, 2007). As grounded theory is an inductive methodology, specific aspects of the literature cannot be identified as appropriate for review until relevant concepts emerge from the collected data.

Following analysis of the final interview, a number of conceptual and theoretical categories had emerged. At this stage the researcher conducted a hand search of published research papers and appropriate literature, using key terms identified in conceptual memos, in order to clarify theoretical concepts and tie these to existing theories.

One theoretical concept in need of additional investigation was 'reciprocal soothing'. From initial emerging codes relating to children's feelings of calm and relaxation, this was expanded to incorporate ideas about the dog relaxing while being read to and the importance of touch to facilitate relaxation. An exploration of published research revealed a number of studies documenting dogs' physiological responses to being stroked. A further study of existing

literature clarified the concept of reciprocal soothing to include physical contact as calming for animals and humans, thereby helping both the dog and child relax.

#### 2.5.4.3 Memo Writing

After coding for a given category several times, theoretical ideas about the category will develop and should be recorded in a memo, capturing the researcher's current thinking on emerging concepts (Glaser & Strauss, 2008).

Glaser has written in detail about the significance of memo writing in classic grounded theory (Glaser, 2013), advocating researchers develop memos in their own style to use as personal guides whilst developing their theory.

Coded incidences, together with field notes (generated both during interviews and in the reflective space following each interview) were used to guide memo writing.

Ben particularly spoke at length about 'being listened to', resulting in multiple codes emerging for this category from his interview. After the interview with Ben, I recorded the following memo:

*Being listened to / being heard*

*People (esp parents) having other commitments and being interrupted, leaving him alone during reading. People not having time for him or breaking their word e.g. not returning.*

*Dogs as having free time and opportunity to listen. Sees dogs as appreciating people giving up their time e.g. by reading to them*

This memo captured my ideas in this early stage of the research about the significance of children being listened to and receiving full attention from their reading audience.

#### 2.5.4.4 Integrating Categories

Just as individual instances of codes within categories are initially compared to one another, new codes for a category are subsequently compared to the category's existing properties. This comparison allows meaningful integration of new properties into a category, resulting in the development of more comprehensive categories to reflect the data (Glaser & Strauss, 2008).

The core category of playful reading developed in this way, evolving throughout the research process. Initial codes emerged from parent comments, survey responses and interviews with Adam and Ben about children 'having fun' with the dog. In Donna's interview, her description of having fun while reading with the dog (*lines 36-39*) expanded properties of this category to include children's comparisons of fun reading with dogs to not enjoying reading with adults.

The category acquired additional properties following Henry's explanation that fun was important to support children in developing their reading skills (*lines 102-106*). In the final interview with Jake, the properties of this category further expanded to integrate notions of children's experiences of reading changing as they progress into school, losing the playful aspects of reading from Early Years settings (*lines 344-346*).

Integrating categories through comparison also requires the researcher to identify underlying shared properties of categories in order to simplify theoretical concepts and create a reduced, higher level theoretical explanation. This process is referred to as delimiting the theory (Glaser & Strauss, 2008).

The category 'animal magnets' explained that children were predisposed to like animals as they were interested in animals, attributing value and significance to them. By comparing the properties of 'animal magnets' and new incidences

being coded to this category with other categories and their properties, sufficient correspondence was identified for 'animal magnets' to be subsumed into the category of 'child's best friend'.

#### 2.5.4.5 Writing the Theory

By the final interview with Jake, the properties of the core category of playful reading had been sufficiently expanded on and clarified through interviews to provide ample explanation of the theoretical concepts involved. Four subcategories had also emerged which underpinned the theoretical explanation provided in playful reading. Glaser and Strauss (2008) refer to this stage of analysis as theoretical saturation, in which most data emerging that relates to the conceptual categories does not introduce or develop any new properties of the category.

After a review of relevant literature to contextualise and complete these conceptual categories, no further data was collected. Glaser warns strongly against data overload caused by the unending collection of data in grounded theory, explaining that while additional data collection is always possible, the researcher will recognise when conceptual categories are saturated and trust the feeling of impetus to describe these by writing up the theory (Glaser, 2012).

At this stage of grounded theory, the researcher returns to their memos, written throughout the process of data collection and analysis, and sorts the memos ready to write up the theory.

The memos in this research were written onto cue cards, allowing the researcher to physically sort and arrange the memos. Memos for each conceptual category forming part of the theory were sorted as demonstrated in the following photographs.



Figure 2.5.4.5a: Sorting memos related to Playful Reading (core category)

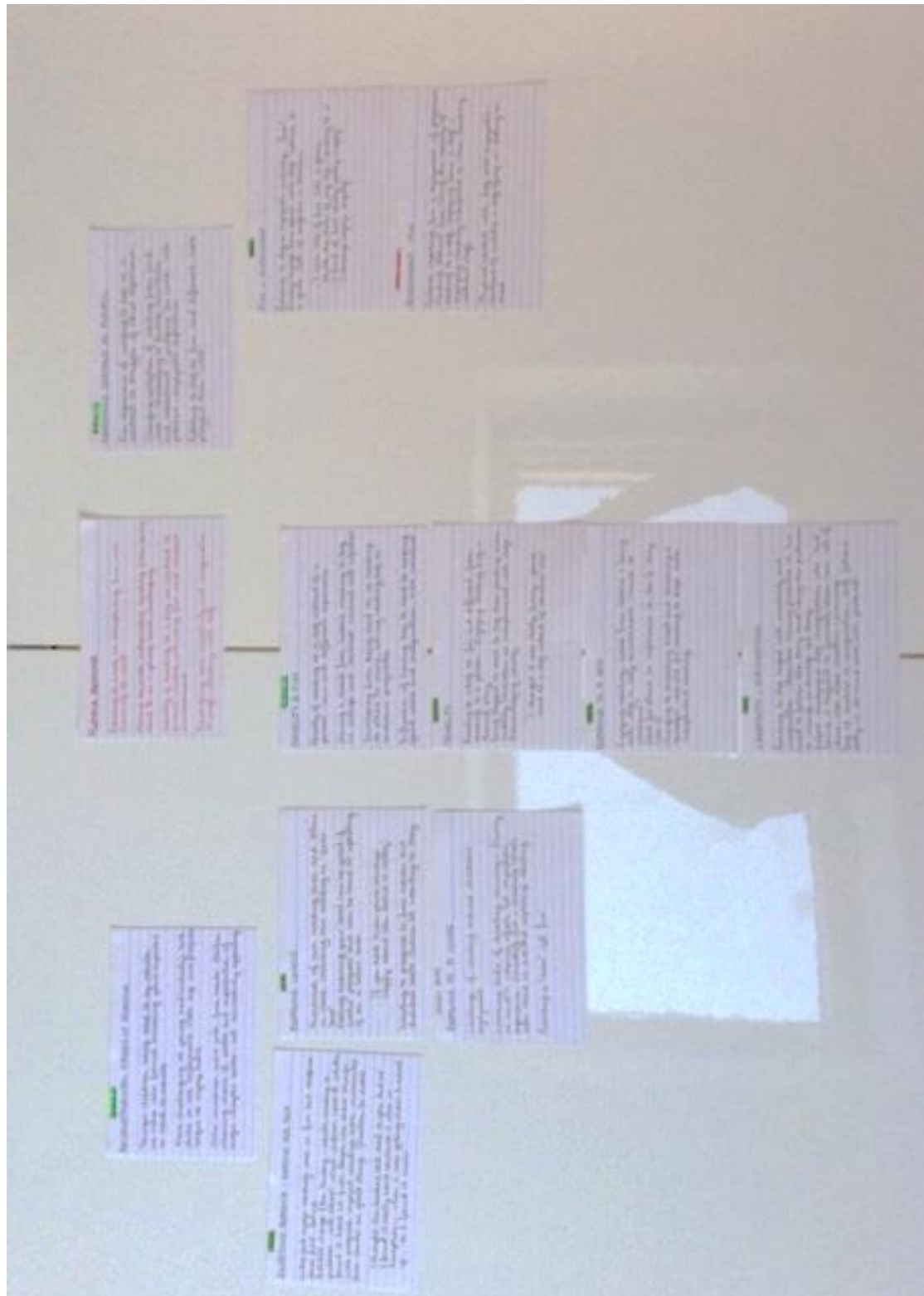


Figure 2.5.4.5b: Sorting memos related to Child's Best Friend (subcategory)



Figure 2.5.4.5c: Sorting memos related to Happy Capital (subcategory)

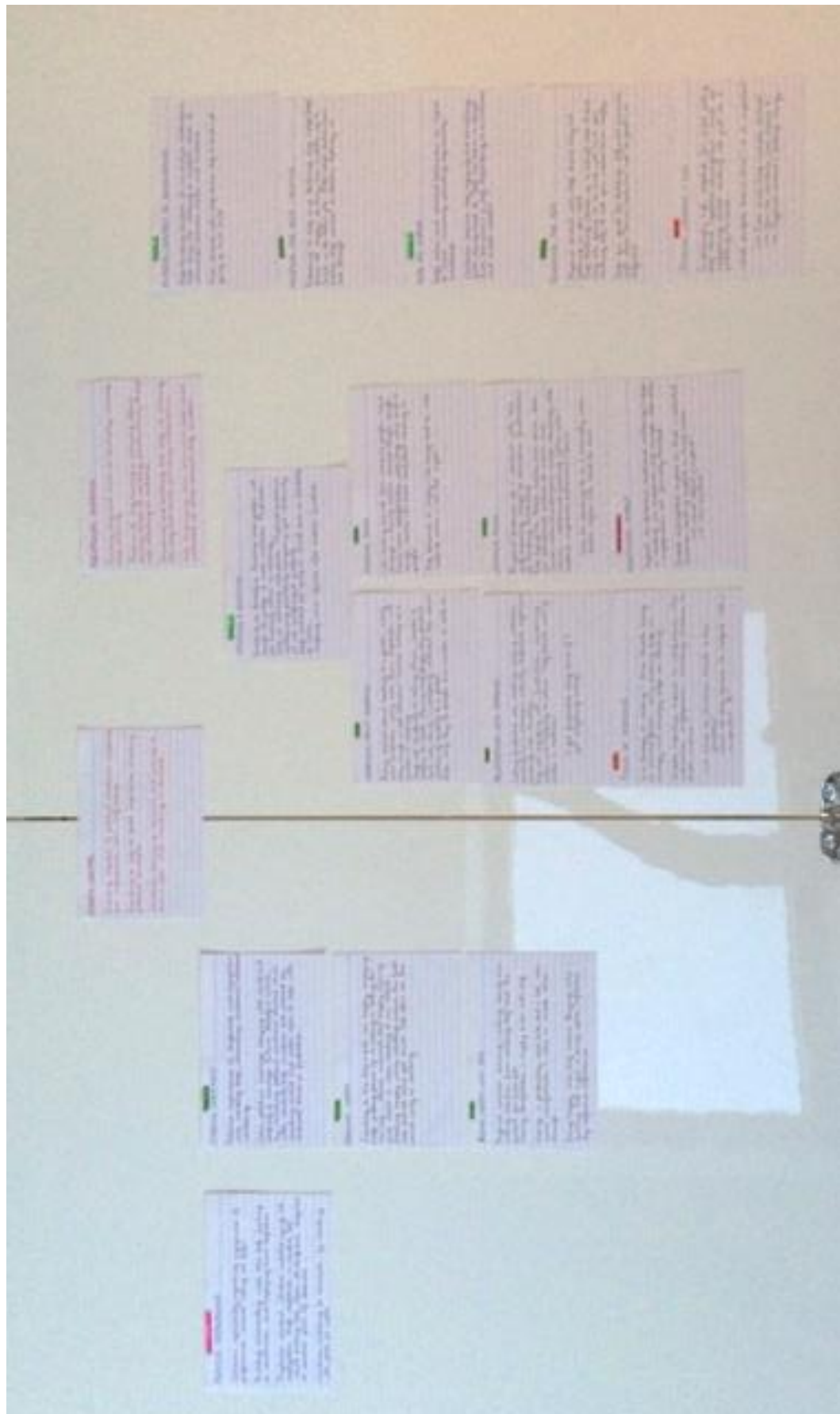
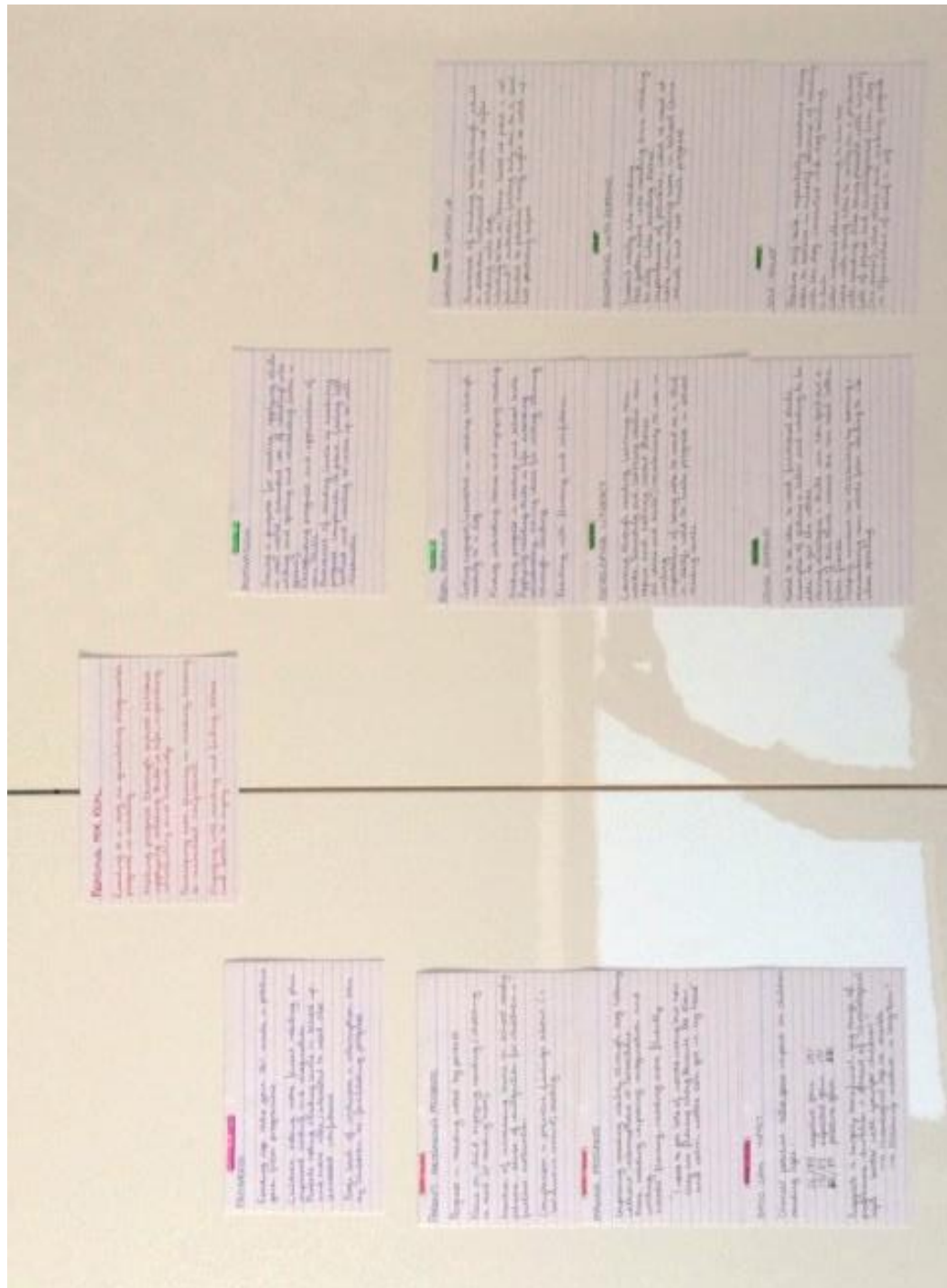


Figure 2.5.4.5d: Sorting memos related to Genuine Listening (subcategory)



Figure 2.5.4.5e: Sorting memos related to Real Reading (subcategory)



Following memo sorting, the theory was written into full, using the memos, and is presented in chapter 4 of this thesis. Glaser is clear that memo sorting and subsequent writing of the theory are part of the grounded theory method as this action produces the substantive theory (Glaser, 2012).

## **2.5.5 Phase 2: Ethical Issues**

### **2.5.5.1 Phase 2: Informed Consent**

All children participating in this research were aged under 16 years old and so parental consent for their participation was required. In addition, the children themselves were asked to give informed consent before involvement in the research project.

As individual children were identified for participation in individual interviews, schools gave them (and their parents) an information sheet provided by the researcher that outlined relevant details of the research project in child-friendly language. Those children who expressed an interest in participation in the research were also provided with a form on which they and their parent recorded that they had given their informed consent.

In each interview the researcher also explained the research in simple terms to each child before starting the interview, providing them with an opportunity to ask questions and corroborating their consent to participate. The low reading ability and very young age of some participants raised some potential issues with regard to obtaining their informed consent via written materials.

Discussing the research in person, the researcher was able to judge the children's comprehension and tailor the language they used accordingly. By individually explaining the research to each participant the researcher was able to ensure that every child was given reasonable opportunity to understand what they were agreeing to.

### **2.5.5.2 Phase 2: Withdrawal**

Whilst obtaining both written and verbal informed consent, all participants were clearly informed of their rights to: a) choose not to provide some or any

information requested by the researcher, b) withdraw from the research at any time in the data collection phase, and c) have their data removed from the research and destroyed, at any time in the data collection phase.

As an unfamiliar adult in a comparative position of power relative to these young children, the researcher was acutely aware that the children might feel obligated to participate and expressing a wish to withdraw could appear daunting. Every effort was made to support the children in feeling at their ease in the interview context and to reassure them that, should they change their mind at any point during the interview or shortly afterward, this was perfectly acceptable.

During the fifth interview Eric agreed to participate in an interview, stipulating that the researcher could ask only seven questions. After a few minutes' conversation Eric declared the researcher had asked all of their allocated questions and the interview was terminated at 4 minutes 44 seconds. Eric's behaviour suggests that the researcher was successful in ensuring the children felt comfortable to withdraw from the research during the interview. Although school staff were explicitly informed that children were entitled to withdraw, even after completing the interview, no conclusions can be drawn with regard to children's confidence in doing so as the researcher is unaware of any such cases.

#### 2.5.5.3 Phase 2: Anonymity & Confidentiality

All children were assigned a gender appropriate pseudonym, allocated in alphabetical order. To further ensure confidentiality, all dogs were also changed to \*dog\* as schools and children could potentially be identified by individuals familiar with the dog attending the school.

Electronic audio files of the interviews were downloaded onto a password protected, encrypted memory stick and kept in a secure location by the researcher.



### **3. Findings: Phase 1**

#### **Structured Telephone Audit Interviews**

This chapter presents the findings from the first phase of this research project.

The first phase consisted of a structured telephone audit interview (see Appendix 4), designed to establish current practice regarding the Reading to Dogs programme within the local authority area. Data was also collected from three schools tracking children's reading progress following their participation in the programme.

Individual school responses to interview questions were anonymised and entered into an electronic database, before being analysed using descriptive statistics.

Several questions invited participants to choose multiple responses, as appropriate, in order to best capture the context of the Reading to Dogs programme as delivered their school. For this reason, although nineteen participants completed the telephone audit, for many questions the total responses number more than nineteen.

In addition schools were also provided with a response option of 'other' to allow unforeseen answers to be incorporated into the audit. While the audit was conducted as a structured telephone interview, some schools elaborated on their responses unprompted. Where appropriate these qualitative comments are incorporated as data.

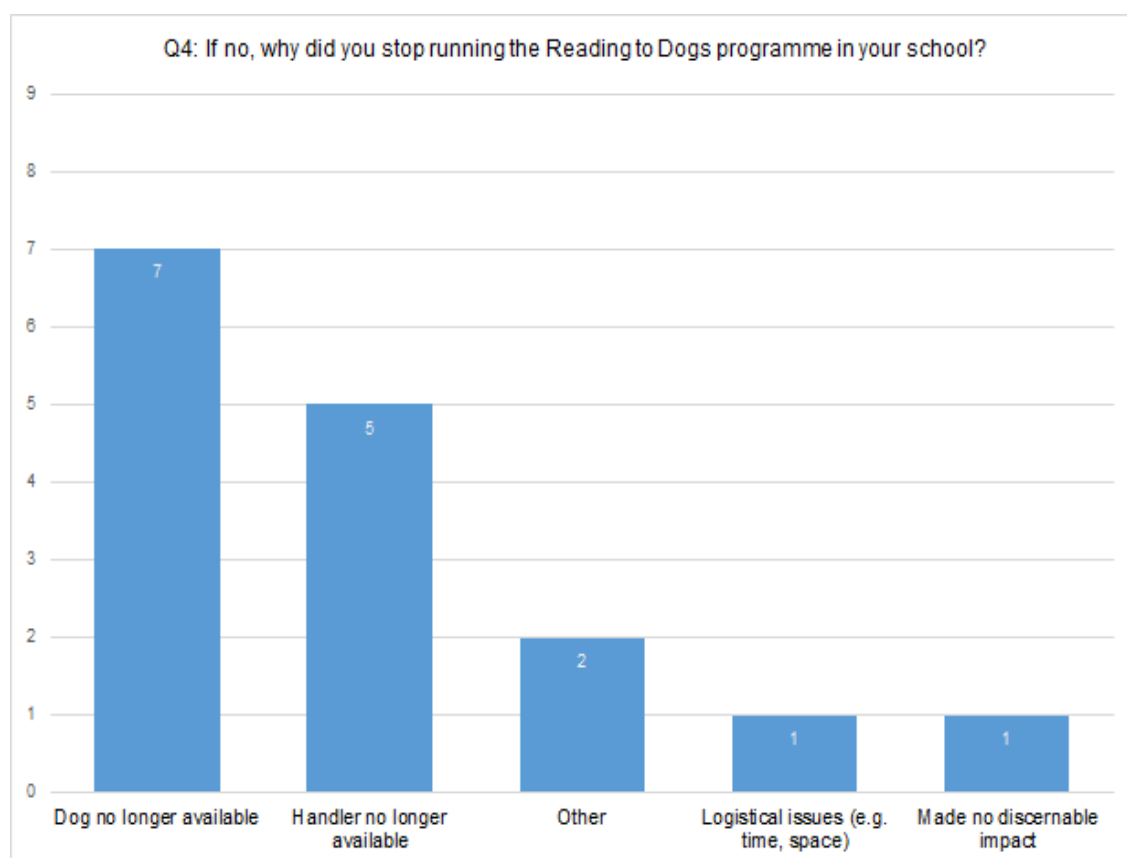
Schools' responses to the audit yielded information about four areas of practice: background to the programme, operation of the programme, behaviour in programme sessions and impact of the programme. The results of these analyses are discussed here for each of the four areas.

### 3.1 Background to the Programme

The local authority in which this research is situated is very large, comprising 602 state schools, 455 of which are primary schools. Altogether 19 primary schools identified as having run the Reading to Dogs programme completed a structured telephone audit interview. No further schools in the local authority were identified to have participated in the Reading to Dogs programme. The proportion of primary schools in the local authority to have run the Reading to Dogs programme is therefore very small (4.17%).

At the time of the structured telephone audit, ten out of nineteen schools reported they were still running the programme. The nine schools no longer running the Reading to Dogs programme provided different reasons for stopping the programme (see Figure 3.1a).

*Figure 3.1a: Graph depicting school responses to question 4 in ranked order*



Eight schools reported to have stopped the programme as either the dog or the

dog's handler were no longer available to deliver the programme, while the ninth school reported that logistical difficulties had caused the programme to cease.

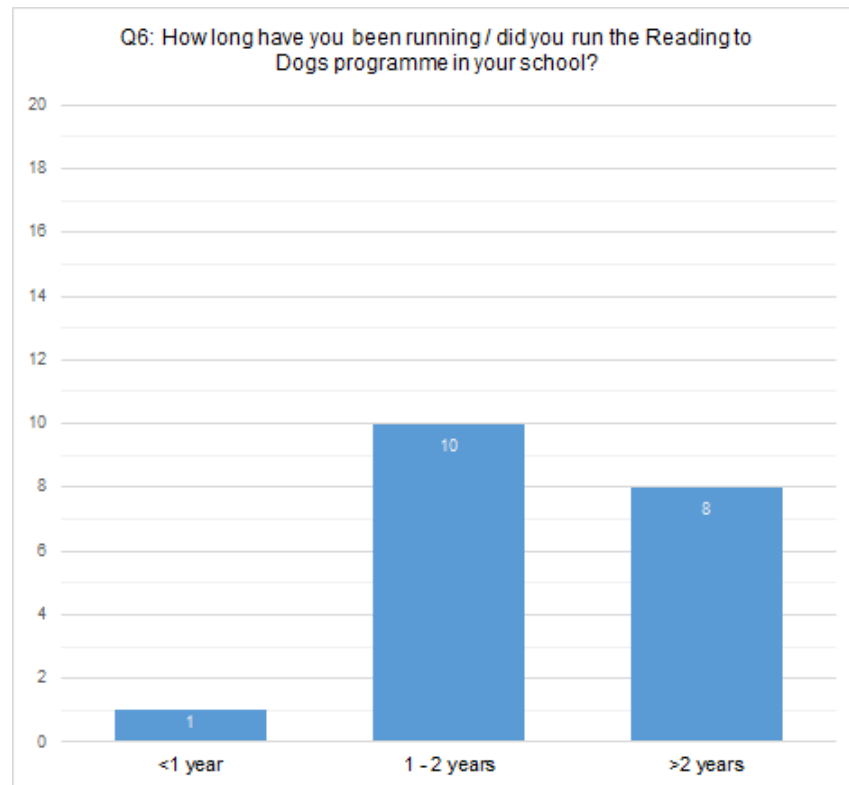
Two schools also attributed the cessation of the programme to other reasons, with one specifying staff changes and the other explaining the adult dog handler had been overly critical of children's reading, with excessive corrections.

There was a high level of enthusiasm for the Reading to Dogs programme and several schools mentioned they were keen to restart the programme and were actively looking for another animal in order to do this.

Of the ten schools continuing to run the Reading to Dogs programme several had adopted creative solutions in order to do so. Whilst looking for a replacement dog, one school had adapted the scheme to use existing school pets and was now running 'Reading to Rabbits', while another participant school was using the school's visiting therapy dog as a reading dog. A third school commented they had recently increased the number of hours spent running Reading to Dogs programme and introduced a second dog.

All nineteen schools reported how long the Reading to Dogs programme had been established in their school. Responses are shown in Figure 3.1b.

Figure 3.1b: Graph depicting school responses to question 6

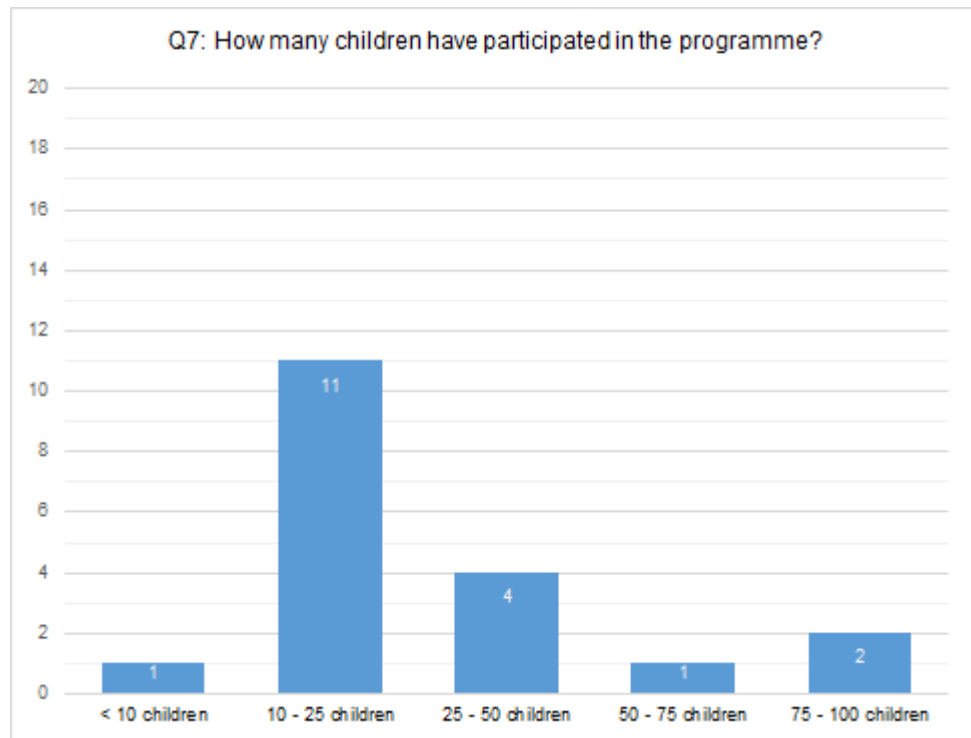


Eighteen schools had been running the Reading to Dogs programme for at least one year, with eight of those reportedly running the programme for over 2 years.

In order to gauge the scale of the Reading to Dogs programme in each school, participants were also asked how many children had participated in the programme since the school began running it (see Figure 3.1c).

Over the course of the programme running in their setting, eleven schools had involved between 10 and 25 children, with a further 4 schools involving between 25 and 50 children. Despite several schools reporting that the programme had been running for over two years, the number of children involved in the programme overall is quite low.

Figure 3.1c: Graph depicting school responses to question 7

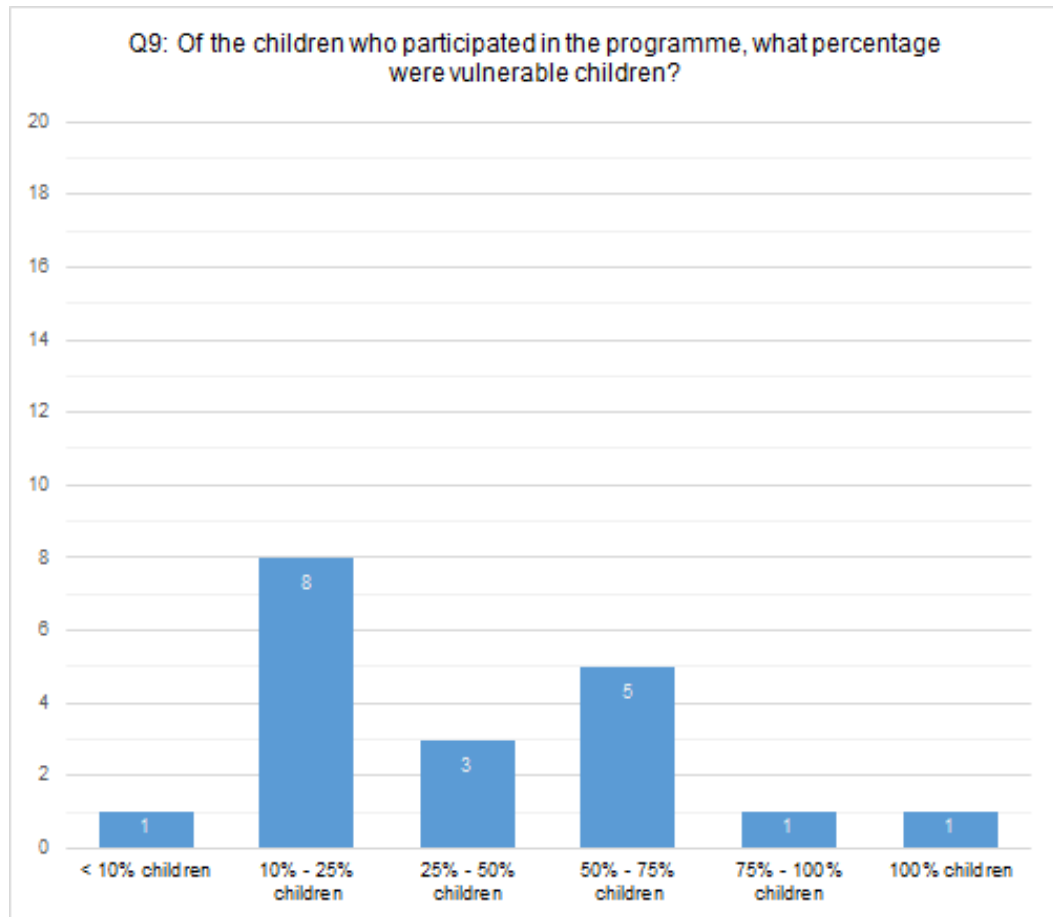


Calculating the mean number of participating children for each school (i.e. 10-25 becomes 17.5) it can be estimated that approximately 585 children within the local authority have participated in the Reading to Dogs programme.

The local authority describes certain children as ‘vulnerable’ because they have special educational needs or other barriers to their learning and development. For the purpose of this research, vulnerable children are therefore defined as: children with a statement of special educational needs, children eligible for free school meals or Pupil Premium funding, children in care or designated as a Child in Need, children at risk of permanent exclusion, with no school place or school refusers.

Schools were asked which percentage range best matched the proportion of vulnerable children who participated in the programme. Responses are presented in Figure 3.1d.

Figure 3.1d: Graph depicting school responses to question 9



The two most common responses from schools were that vulnerable children accounted for 10-25% or 50-75% of children who participated in the programme.

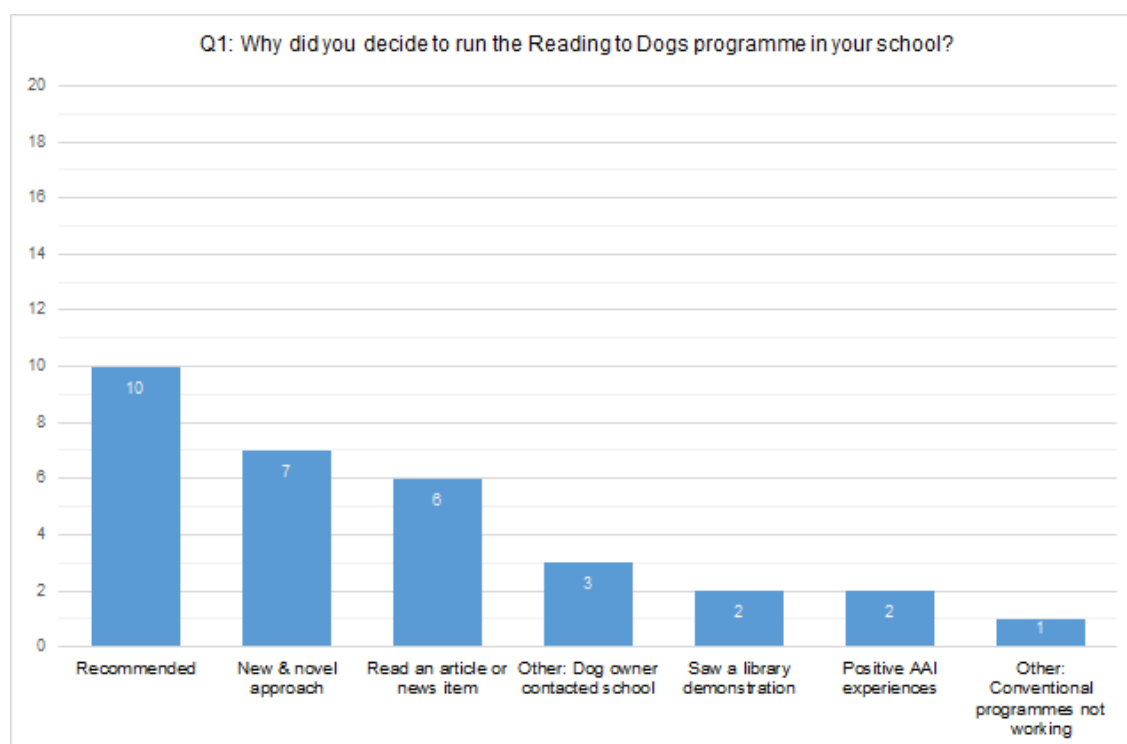
Eight schools, one half of respondents, reported that 10-25% of those who participated in the Reading to Dogs programme were vulnerable children. Another three schools reported that vulnerable children accounted for 25-50% of children who participated in the programme.

Using the mean percentage for each school (i.e. 10-25% becomes 17.5%), it is possible to extrapolate the number of vulnerable children to have participated in the programme from each school. These figures suggest that around 258 (44.1%) of the 585 children to have participated in the Reading to Dogs programme were classed as vulnerable children. It should be noted that these

are estimations, serving only as an indication of the actual number of children to participate.

Schools were also asked why they had chosen to introduce the Reading to Dogs programme into their school (see Figure 3.1e).

*Figure 3.1e: Graph depicting school responses to question 1 in ranked order*



Over half of participants chose to implement the Reading to Dogs programme following a recommendation from another school, while a further third of schools had seen a news item or read an article which persuaded them to run the programme. A large number of schools were also enticed by the programme's new and novel approach. In all, eighteen out of nineteen participant schools selected at least one response from these three answer categories.

Three schools reported that a dog owner had directly contacted the school, offering to deliver the programme. Two of these schools also had positive experiences of other Animal Assisted Interventions (AAIs).

One school directly referenced a need for the programme as other more traditional interventions were not sufficiently addressing children's reading needs.

### 3.1.1 Summary

Within the local authority 4% of state primary schools have run the Reading to Dogs programme, involving a total of approximately 585 children, of which 258 (44%) were identified as vulnerable children.

In the majority of schools the Reading to Dogs programme was introduced following either a recommendation, a persuasive news article or due to its new and novel approach. On average, the programme has been running for 1-2 years in schools, with many schools delivering the programme for over 2 years.

At the time of the audit, ten of the nineteen participant schools were still running the programme, often adopting creative solutions to do so e.g. adopting 'Reading to Rabbits'. Cessation of the programme in schools was primarily attributed to the lack of availability of a reading dog or dog handler.

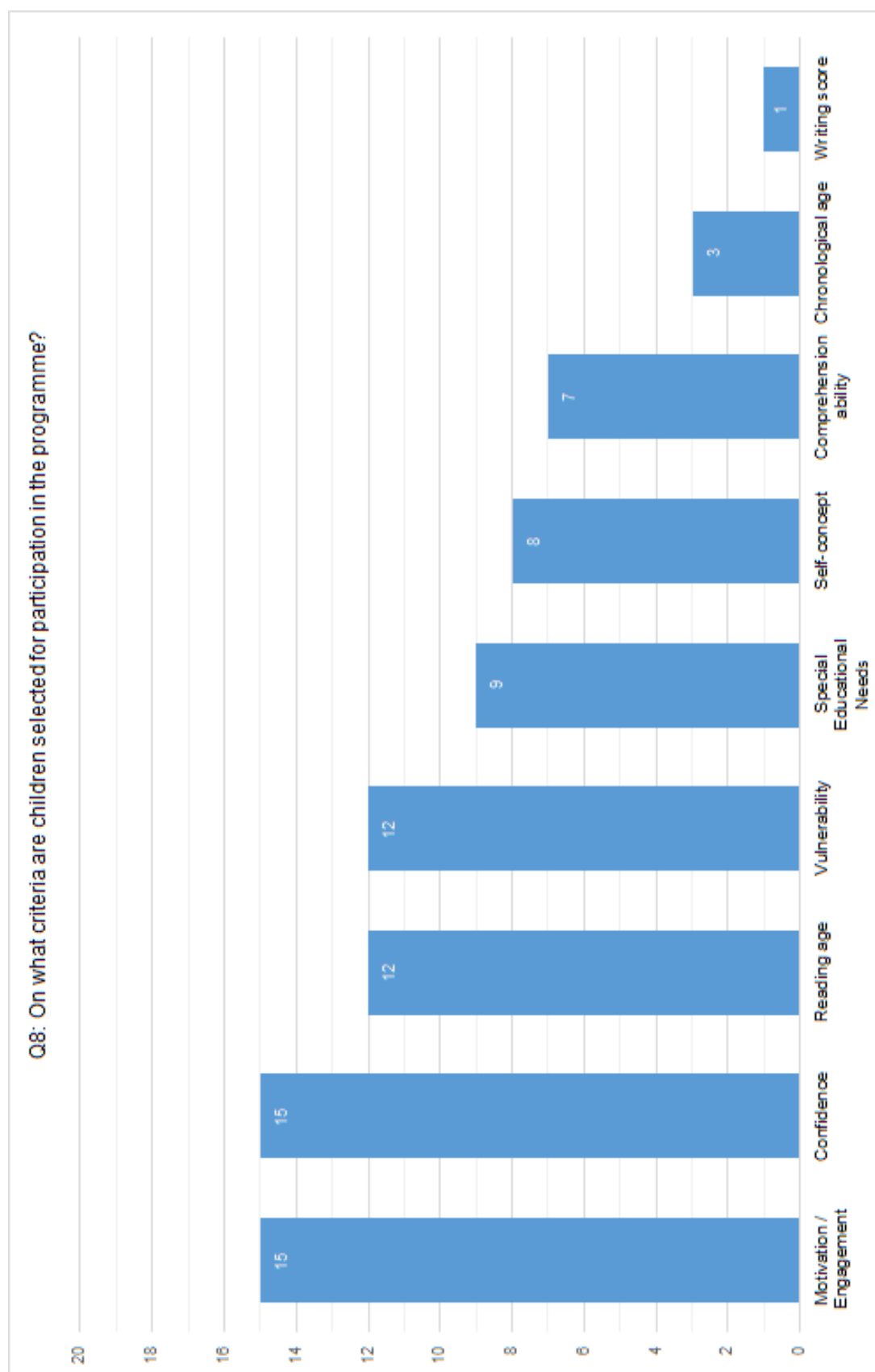
## **3.2 Operation of the Programme**

The structured telephone audit interview also investigated logistical and administrative aspects of the Reading to Dogs programme in schools.

The audit asked what criteria schools applied to select children for their participation in the programme (see Figure 3.2a).



Figure 3.2a: Graph depicting school responses to question 8 in ranked order



Fifteen schools reported that they selected children for the Reading to Dogs programme who demonstrated poor motivation and engagement or lacked

confidence. A large proportion of schools also included children's reading age as part of their selection criteria.

In addition, twelve schools considered 'vulnerable' children (e.g. Looked After Children, children at risk of exclusion, children eligible for free school meals or children making low academic progress) for participation in the programme.

Half of the participant schools also used Special Educational Needs or children's self-concept as a factor when selecting children to participate in the Reading to Dogs programme.

All participant schools gave multiple responses and ten schools chose five or more responses to this question, indicating that schools employed a variety of selection criteria.

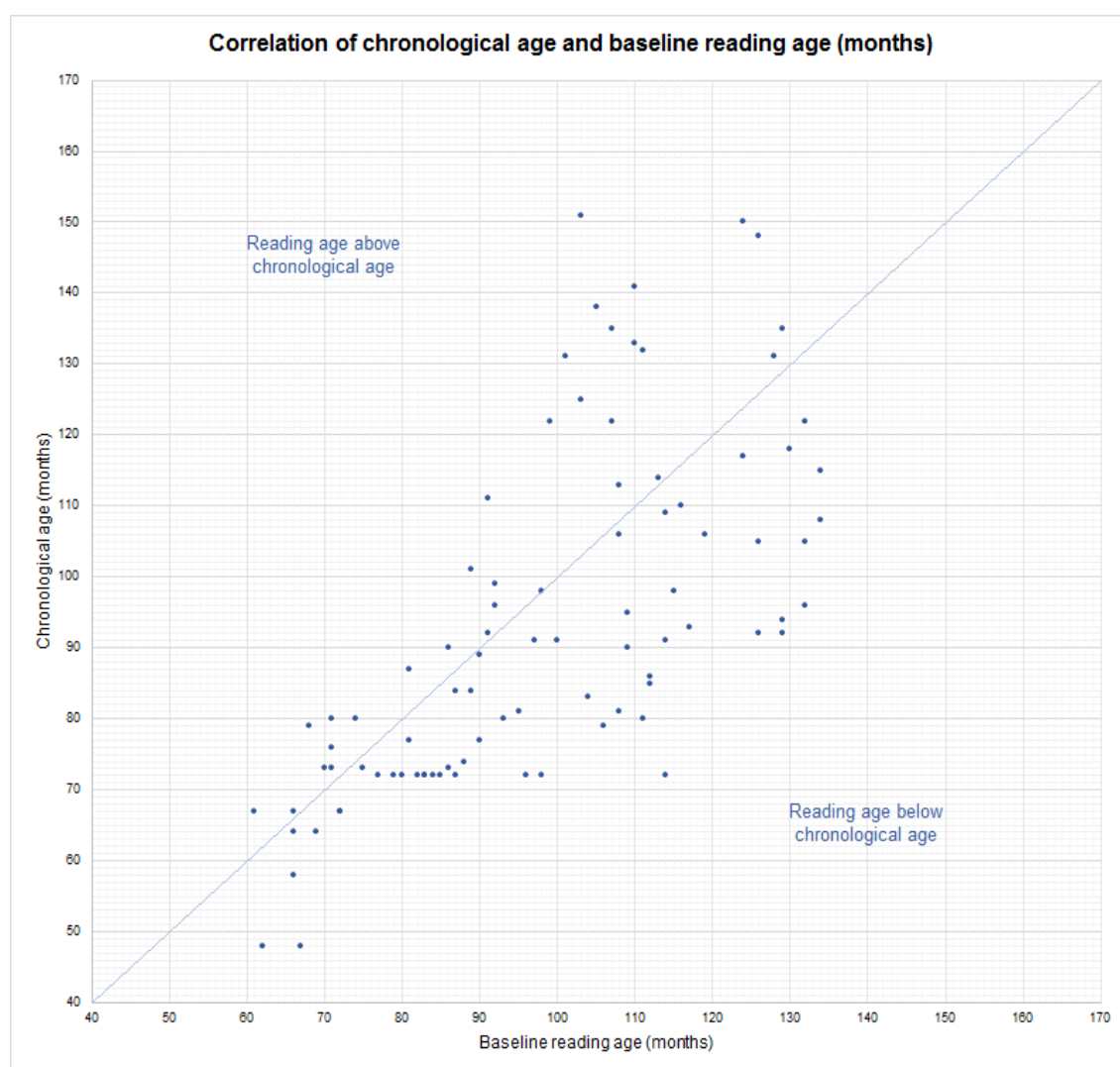
Three of the schools had independently gathered data on the reading age of 89 of the children who had participated in the Reading to Dogs programme. This anonymised data on reading scores was shared with the researcher.

Reading ages are age equivalent scores obtained from norm-referenced, standardised assessments of reading, whereby an individual child's performance is compared to a sample of their peers and equated to the age group among whom this reading attainment was the median score. A reading age of 4 years (the lowest reading age in this sample) therefore indicates the specific score obtained in a given assessment was obtained, on average, by children aged 4 years.

A comparison of children's reading ages (as assessed by schools prior to their participation in the programme) and their chronological ages, is presented in Figure 3.2b.

Children with a broad range of reading ages (from 4 years to 12 years 7 months) and chronological ages (from 5 years 1 month to 11 years 2 months) were included by schools in the Reading to Dogs programme. It can also be seen that not all children selected to participate had a reading age below their chronological age.

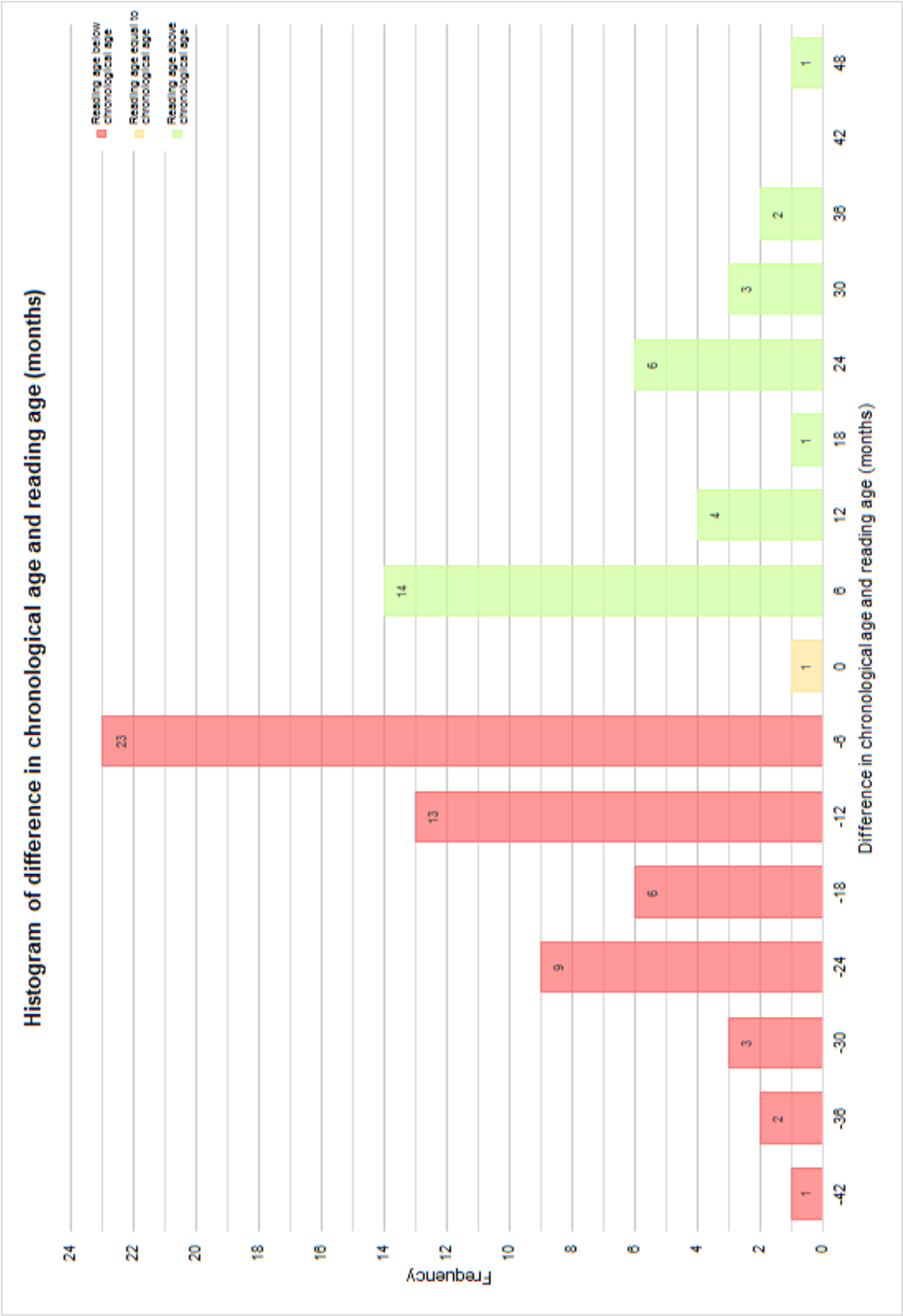
*Figure 3.2b: Scattergram depicting correlation between children's chronological age and baseline reading age (months)*



While reading age does not directly equate to chronological age, it is nonetheless interesting to note the difference between chronological ages and reading ages of the children selected by schools to participate in the Reading to Dogs programme.

The frequency of differences in chronological age and baseline reading age is shown as a histogram in Figure 3.2c. The mean difference between children's chronological and reading age was -5.07 months.

Figure 3.2c: Histogram showing frequency of differences in chronological ages and reading ages in 6 month intervals



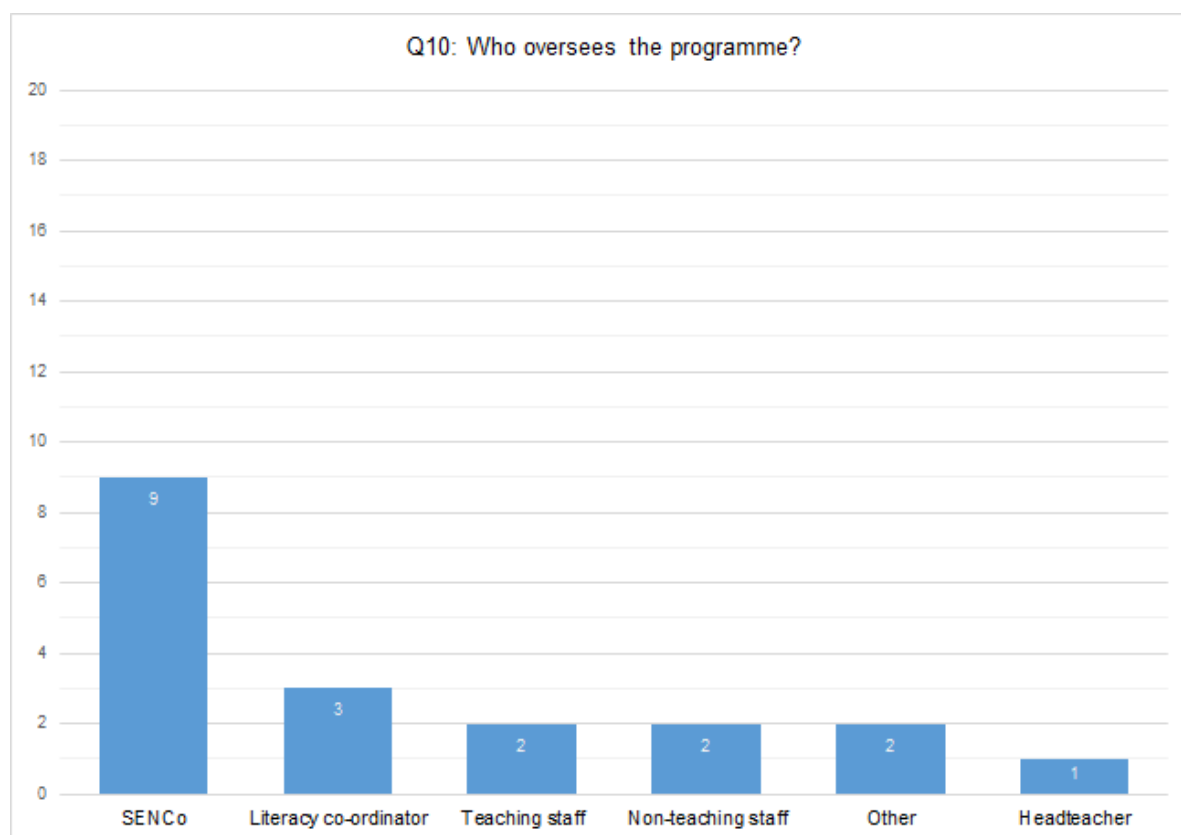
At the start of their participation in the Reading to Dogs programme, 57 children (64%) had a reading age below their chronological age (coloured red).

Conversely, 31 children (35%) began the programme with a reading age above their chronological age (coloured green) and 13 of these children (15%) had a reading age more than one year ahead of their chronological age. A single child (1%) had a reading age equivalent to their chronological age (coloured orange) at the start of the programme.

Based on this data it is clear that schools are not simply selecting children with a reading age below their chronological age.

Schools were also asked to specify the individual responsible in their school for overseeing the programme (see Figure 3.2d).

*Figure 3.2d: Graph depicting school responses to question 10 in ranked order*



In almost half of schools, the school SENCo oversees the programme however the responses from the remaining ten schools are highly varied. Of the two

schools selecting 'other' responses, the individual roles named were deputy headteacher and school secretary.

Schools were also asked who delivered the Reading to Dogs sessions (see Figure 3.2e).

Figure 3.2e: Matrix depicting school responses to question 11

**Q11: Who delivers the sessions?**

	<u>Not</u> school staff	School staff
<b>Dog Owner</b>	8 schools	9 schools
<u>Not Dog owner</u>	1 school	1 school

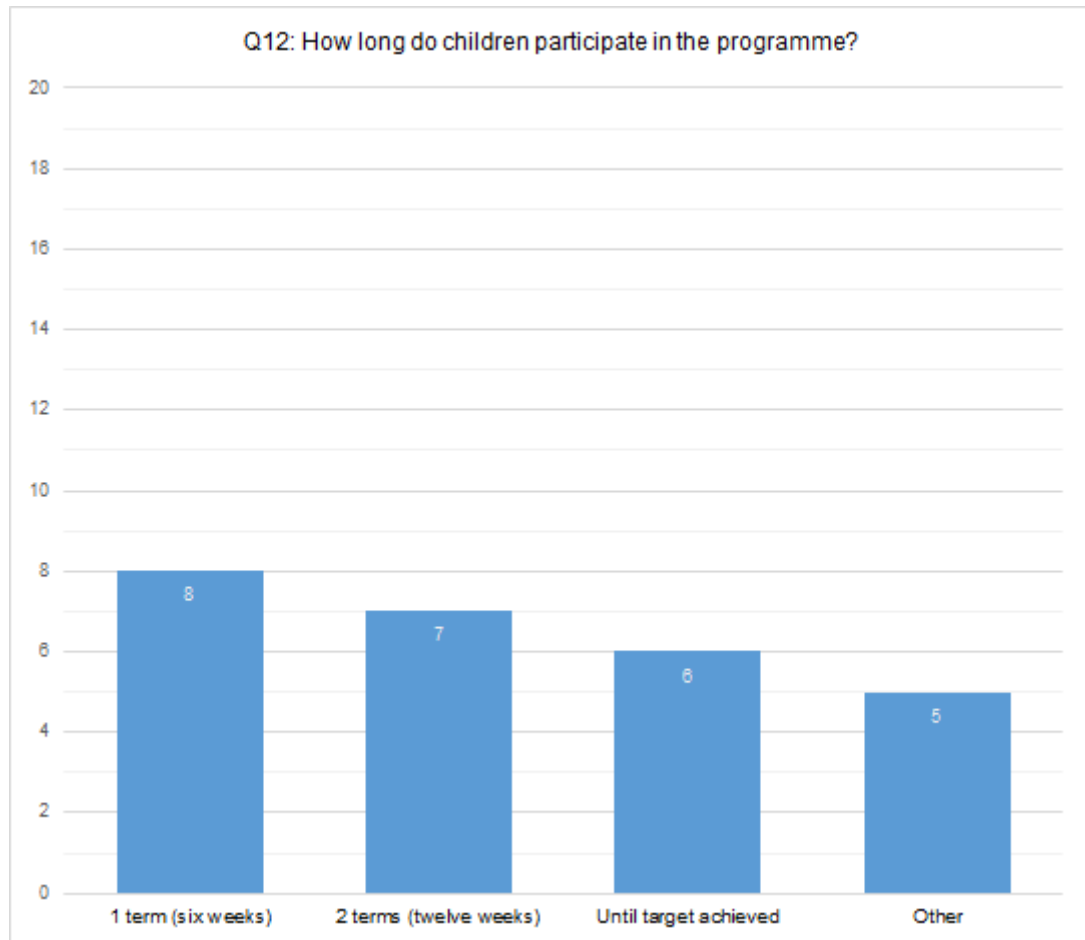
In total, seventeen schools reported that the dog owner was present during delivery of the programme: eight schools reported that the programme was delivered by the dog owner alone while a further nine schools reported that sessions were delivered by both the dog handler and a staff member (either teaching or non-teaching).

Of the remaining two schools, one reported a non-teaching member of staff delivered the sessions, while the other specified a volunteer who was not the dog owner.

Schools were asked for how long individual children participated in the Reading to Dogs programme (see Figure 3.2f).

Overall, fourteen individual schools selected specific time periods during which children participated in the Reading to Dogs programme, with programmes lasting between six and twelve weeks.

Figure 3.2f: Graph depicting school responses to question 12

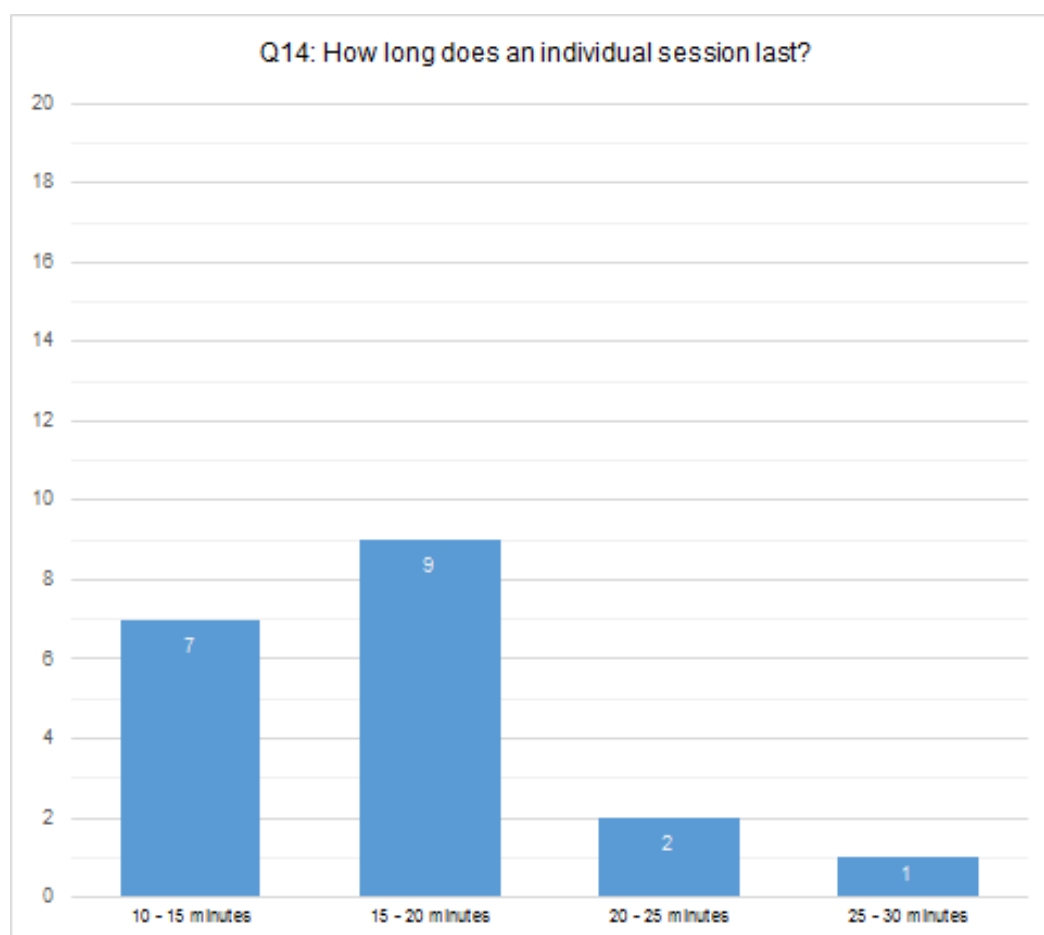


Six schools responded that children participated until they met a predetermined target, with examples ranging from reading at an age appropriate level, to carrying their confidence and progress forward (without relapse) or specific wellbeing targets.

Five schools also responded 'other', clarifying that the duration of children's participation was either a full academic year, dependent on the perceived impact of the programme, or dependent on the individual child's level of need. One school commented a particular child had participated for almost two academic years due to selective mutism needs.

Schools were also asked the length of an individual session (see Figure 3.2g).

Figure 3.2g: Graph depicting school responses to question 14



Nine schools reported that an individual Reading to Dogs session lasted between 15 and 20 minutes. Seven schools reported shorter sessions, lasting 10 to 15 minutes. Three remaining schools reported longer sessions, lasting up to 30 minutes each. The mean duration of an individual session was 17 minutes.

Schools were also asked how frequently children participated in sessions for the Reading to Dogs programme. Eighteen of the nineteen participant schools reported children attended weekly sessions of the Reading to Dogs programme, while a single school reported that children attended sessions several times a week.



### 3.2.1 Summary

Schools employ multiple selection criteria to identify children for participation in the Reading to Dogs programme, predominantly focussing on building motivation, engagement and confidence. Some schools also select children based on their reading age and vulnerability.

The reading age of a sample of 89 children revealed children's reading ages were on average 5 months below their chronological age however 35% had a reading age above their chronological age.

The Reading to Dogs programme is usually overseen in school by the SENCo or Literacy co-ordinator and delivered by the dog owner, often with a member of school staff. Participation in the programme lasts for between six and twelve weeks, although several schools also required children to meet a predetermined target e.g. reading at an age appropriate level. Children attend weekly sessions, lasting an average of 17 minutes.

### **3.3 Behaviours in Programme Sessions**

The structured telephone audit also explored behaviours that would feature in a Reading to Dogs session. Only eighteen schools responded to this question as one participant school reported too much variance between individual sessions.

Schools were presented with behaviours that might feature in a typical session and invited to expand the list. To assist with analysis, all reported behaviours (including those supplied by schools) were collated and grouped into three categories: child led behaviours, adult led behaviours and dog related behaviours.

The categorisation of each reported behaviour is shown in Figure 3.3.

Figure 3.3: Categorisation of reported behaviours

Child led behaviours	Adult led behaviours	Dog related behaviours
Child reading to dog	Adult talking to child	Child petting dog
Child talking to dog	Adult silent	Giving dog a treat
Child talking to adult	Adult questioning child (indirectly)	Child playing with dog
Child explaining to dog	Adult questioning child (directly)	Walking the dog
Child reading to adult	Adult reading to child	Dog escorting child to/from session
Talking about the dog	Talking about other issues	Doing a trick with the dog
Commenting on dog's behaviour	Adult supporting reading	Drawing a picture for the dog
Child show and tell (to dog)		

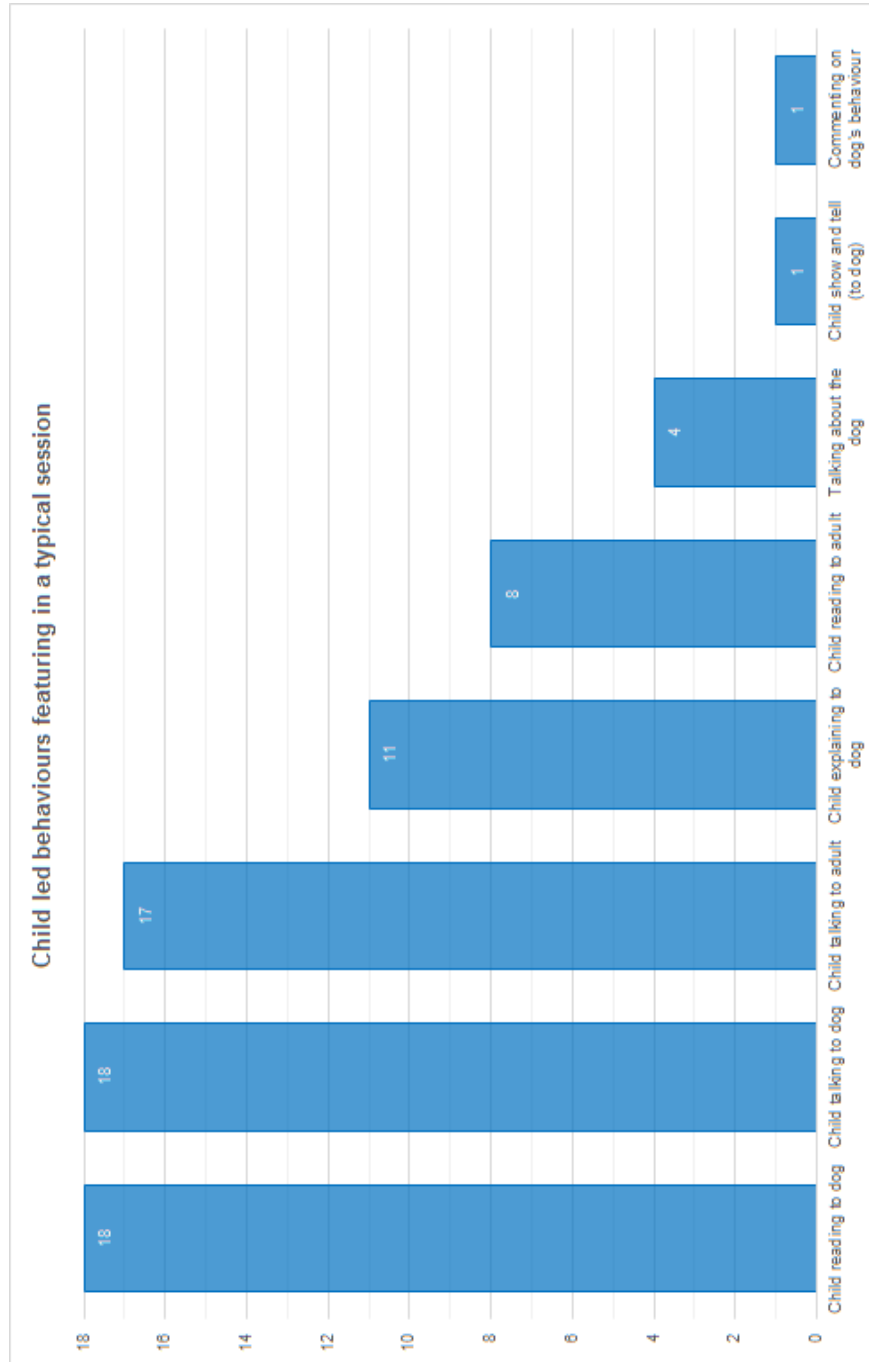
Schools were also asked to indicate at what point in a session each behaviour would feature: at the start, middle, end or throughout a session.

Schools were invited to select as many time points as applied to each behaviour, for example the child reading to the dog might occur at the start and middle of a session. Behaviours reported by schools to occur throughout a session were counted as occurring both at the start, middle and end of a session, i.e. all three time points.

### 3.3.1 Child Led Behaviours

Total responses from schools regarding child led behaviours reported to feature in a typical session are presented in ranked order in Figure 3.3.1a.

Figure 3.3. 1a: Graph depicting total school responses for child led behaviours during a typical session, presented in ranked order



Child led behaviours received the highest consistent responses from participant schools of all three behaviour categories.

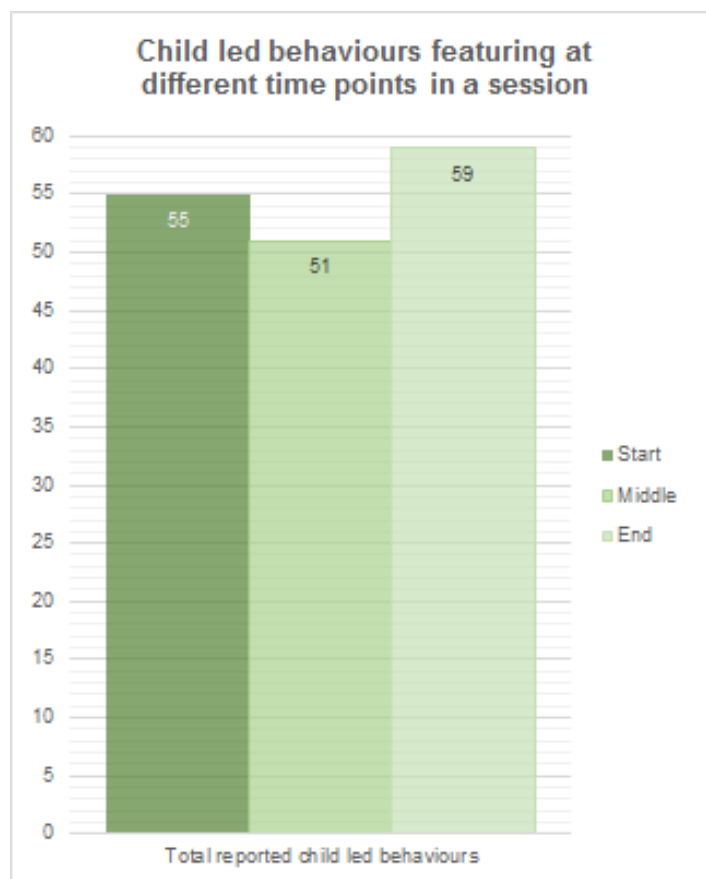
All eighteen schools reported that the child would talk and read to the dog, as compared to only eight schools reporting the child would read to the adult.

Seventeen schools reported the child would talk to the adult and over half of participant schools said the child would explain to the dog what they had been reading.

A small number of schools also reported the child would talk about the dog during a typical session, while the child performing show and tell to the dog or commenting on the dog's behaviour were also reported by individual schools.

A summary of the total reported child led behaviours at each time point is provided in Figure 3.3.1b.

Figure 3.3.1b: Graph depicting total reported child led behaviours at different time points in a session



The responses from schools indicate a relatively even spread of time points, suggesting that child led behaviours occurred throughout a session. The different time points at which schools reported each child led behaviour would feature during a session are presented in Figure 3.3.1c.

Figure 3.3.1c: Total school responses for child led behaviours at different time points in a session

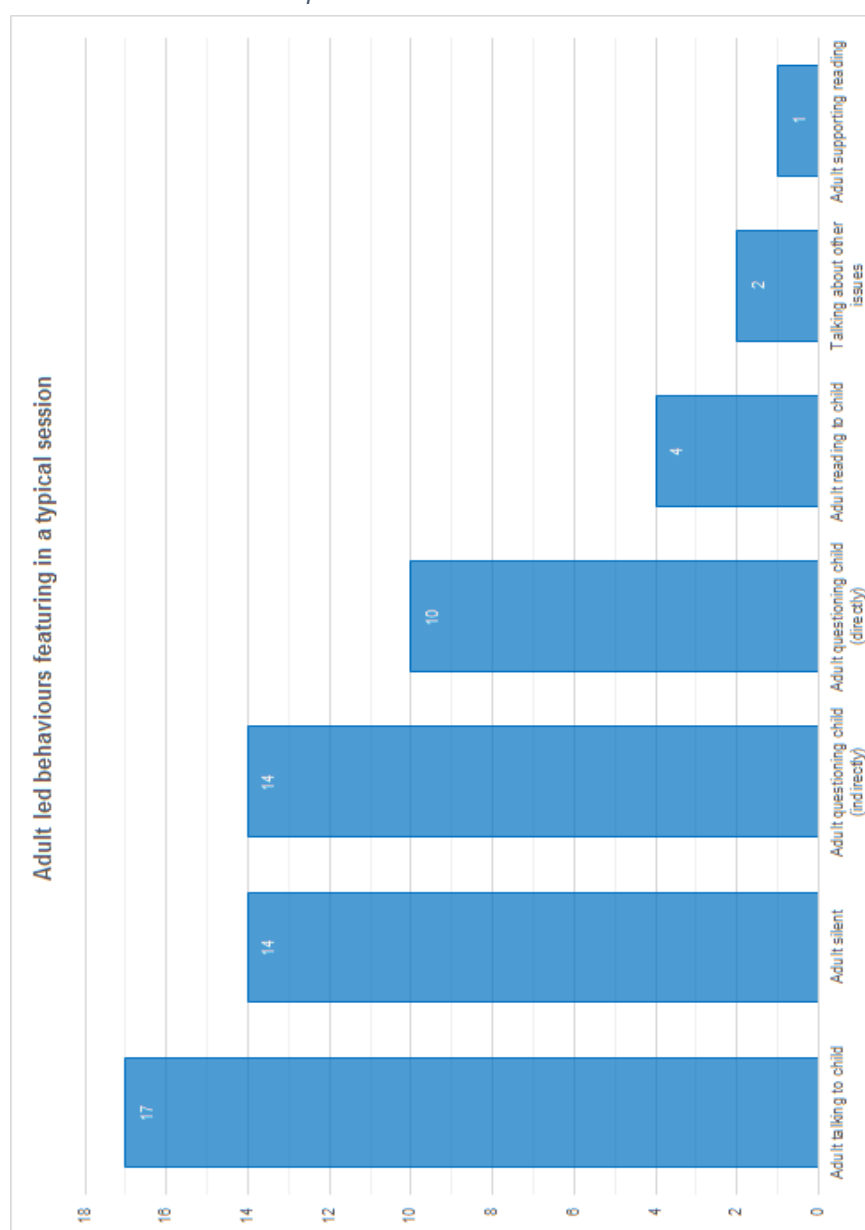
	Child reading to dog	Child talking to dog	Child talking to adult	Child explaining to dog	Child reading to adult	Talking about the dog	Child show and tell (to dog)	Commenting on dog's behaviour
Start	11	18	16	3	4	2	0	1
Middle	17	9	10	5	6	2	1	1
End	12	14	15	9	6	2	0	1

The child reading to the dog was reported to occur more often in the middle of a session, while the child talking to either the dog or an adult was more frequently reported at the start and end of a session. The child either explaining their reading to the dog or reading to the adult was reported more at the end of a session.

### 3.3.2 Adult Led Behaviours

Total responses from schools regarding adult led behaviours reported to feature in a typical session are ranked and presented below in Figure 3.3.2a.

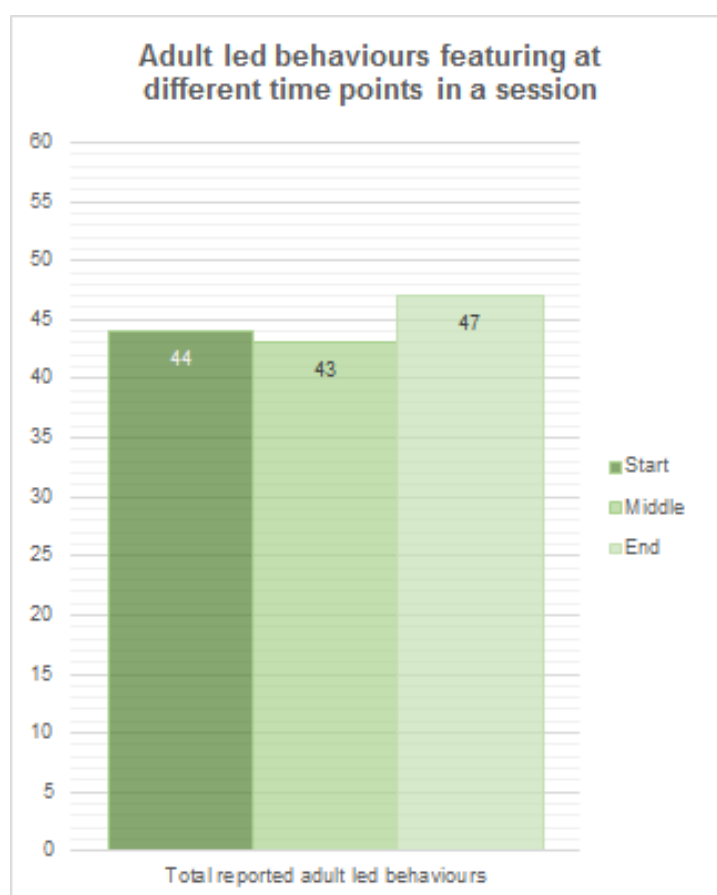
*Figure 3.3.2a: Graph depicting total school responses for adult led behaviours during a typical session, presented in ranked order*



Adult led behaviours also received a high level of responses from schools, with almost all participant schools reporting the adult would talk to the child and fourteen schools responding that the adult would be silent at times during a session. Fourteen schools also reported the adult would indirectly ask the child questions about what they had read, as though enquiring on the dog's behalf (e.g. "Can you tell the dog what xx means?"), while ten schools said the adult would directly question the child about their reading.

A summary of the total reported adult led behaviours at each time point is provided in Figure 3.3.2bFigure.

*Figure 3.3.2b: Graph depicting total reported adult led behaviours at different time points in a session*



As with child led behaviours, reported adult led behaviours appear to be spread evenly throughout a session. Figure 3.3.2c presents the different time points during a session at which schools reported that talking behaviours would occur.

*Figure 3.3.2c: Total school responses for talking behaviours at different time points in a session*

	Adult talking to child	Adult silent	Adult questioning child (indirectly)	Adult questioning child (directly)	Adult reading to child	Talking about other issues	Adult supporting reading
Start	17	6	7	10	3	1	0
Middle	11	10	10	9	1	1	1
End	14	7	12	10	3	1	0

Schools' responses indicate that the adult talking to the child occurred more at the start and end of a session, while the adult being silent followed the reverse pattern being more frequent in the middle of a session. Indirect questions from the adult increased toward the end of a session, whilst direct questions were more evenly spread.

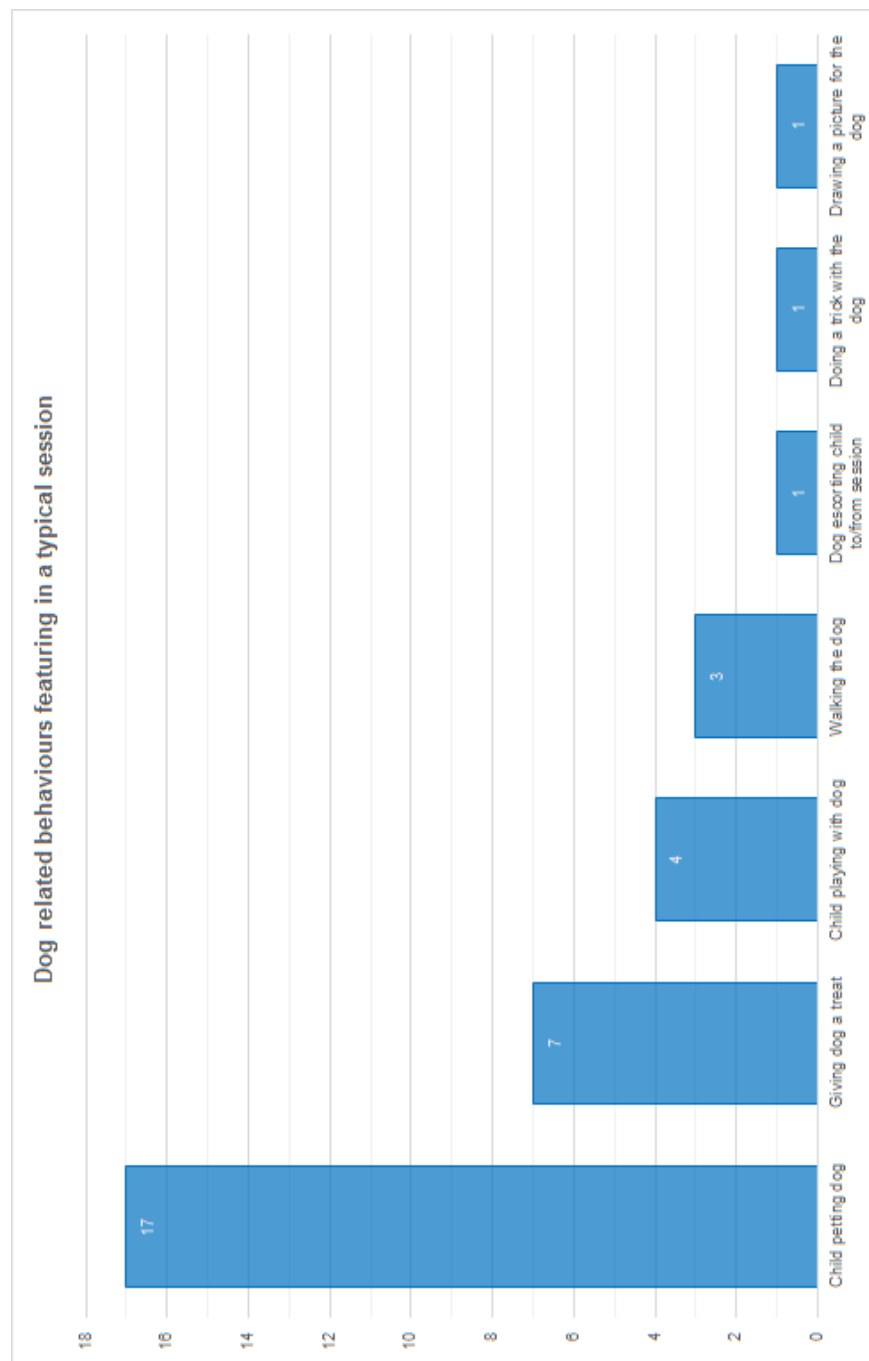
### 3.3.3 Dog Related Behaviours

Figure 3.3.3a presents total responses from schools regarding dog related behaviours reported to feature in a typical Reading to Dogs session.

The child petting the dog was the most commonly reported dog related behaviour to feature during a session, with almost all schools reporting this.

Seven schools specifically mentioned giving the dog a treat, while a few schools also reported the child playing with the dog or walking the dog in a Reading to Dogs session.

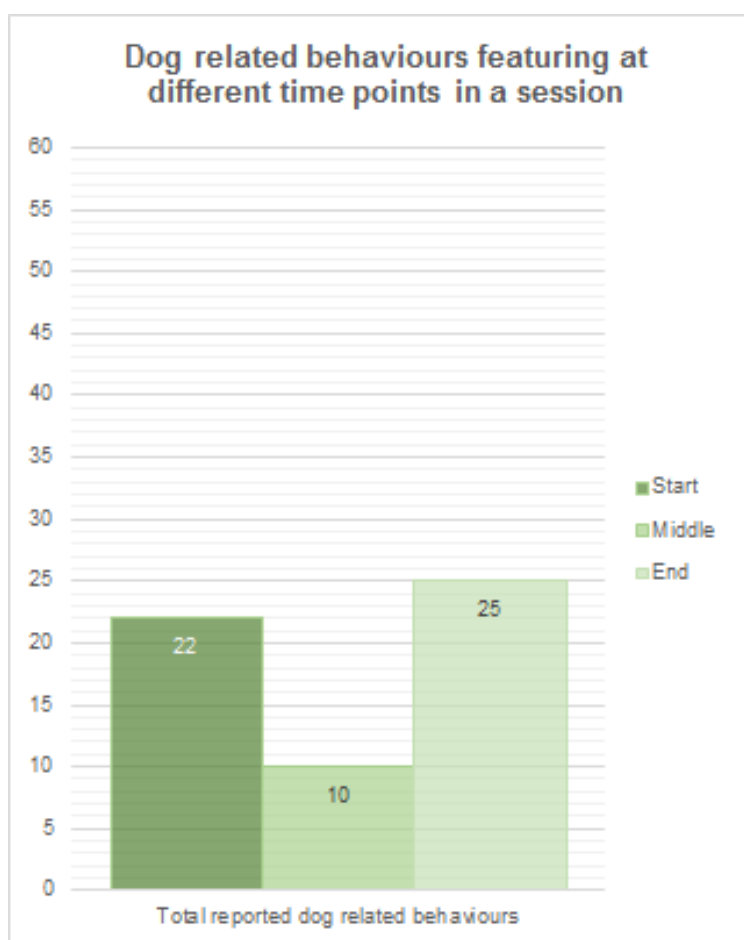
Figure 3.3.3a: Graph depicting total responses for dog related behaviours included in a typical session, presented in ranked order



Total reported dog related behaviours at each time point in a session are summarised in Figure 3.3.3b.



Figure 3.3.3b: Graph depicting total reported dog related behaviours at different time points in a session



In a typical session, dog related behaviours were more frequent at the start and end of a session, decreasing toward the middle of a session.

Dog related behaviours, reported by schools as occurring at different time points during a session, are presented in Figure 3.3.3c.

Figure 3.3.3c: Total school responses for dog related behaviours at different time points in a session

	Child petting dog	Giving dog a treat	Child playing with dog	Walking the dog	Dog escorting child to / from session	Doing a trick with the dog	Drawing a picture for the dog
Start	16	0	4	2	0	0	0
Middle	6	0	1	2	0	0	1
End	12	7	3	1	1	1	0

Directly interacting with the dog through petting or playing was more commonly reported at the start and end of a session, although a few schools reported the child would pet the dog throughout the session. All seven schools which

reported the child giving the dog a treat stated this occurred at the end of the session.

#### 3.3.4 Summary

A typical Reading to Dogs session involved three categories of behaviours: child led, adult led and dog related behaviours.

Prevalent child led behaviours included: the child reading to the dog; the child talking to the dog; the child talking to the adult; and the child explaining to the dog what they had read.

Frequently reported adult led behaviours were: the adult talking to the child; the adult being silent for periods of time; the adult indirectly questioning the child, i.e. asking on behalf of the dog; the adult directly questioning the child.

Dog related behaviours included: the child petting the dog; the child giving the dog a treat; and the child playing with the dog. With the exception of petting the dog, dog related behaviours were less common than child or adult led behaviours overall.

Both adult and child led behaviours occurred throughout a Reading to Dogs session whereas dog related behaviours occurred more at the start and end of a session.

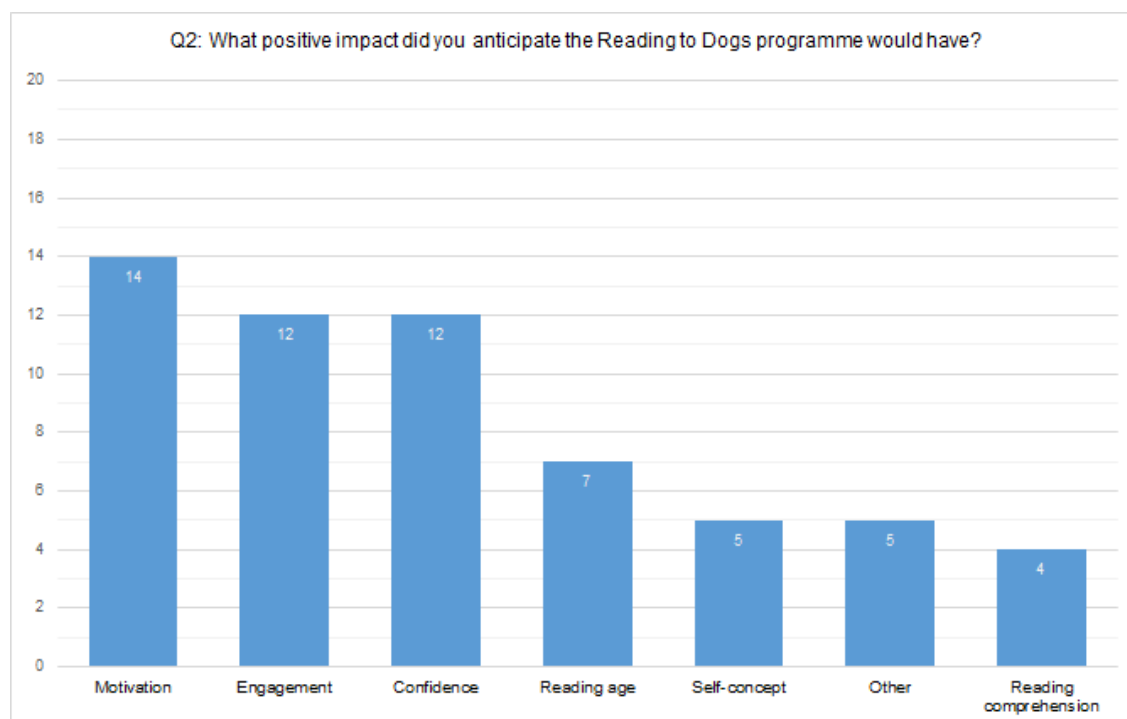
### **3.4 Impact of the Programme**

The structured telephone audit also explored the impact of the Reading to Dogs programme. Schools were asked what positive impact they anticipated the programme would have (see Figure 3.4a).

Overall eighteen schools anticipated the Reading to Dogs programme would positively impact on children's motivation, engagement or confidence. Five of

these schools also expected that children's self-concept would be improved by their participation in the programme.

*Figure 3.4a: Graph depicting school responses to question 2 in ranked order*



This ties in with responses to schools' selection criteria for children to participate in the programme. As most schools expected the Reading to Dogs programme to positively affect children's motivation, engagement or confidence, it follows that schools would also select children with poor motivation, engagement or confidence to participate in the programme.

In contrast, only seven schools anticipated the programme would positively impact on children's reading age, and four anticipated an increase in children's reading comprehension (both measures of children's reading ability frequently referenced by schools).

Several schools also offered 'other' responses. These schools reported expectations of children showing greater interest in books, encouraging reluctant readers and giving a purpose to reading through an animated audience, resulting in increased enjoyment. One school reported an additional

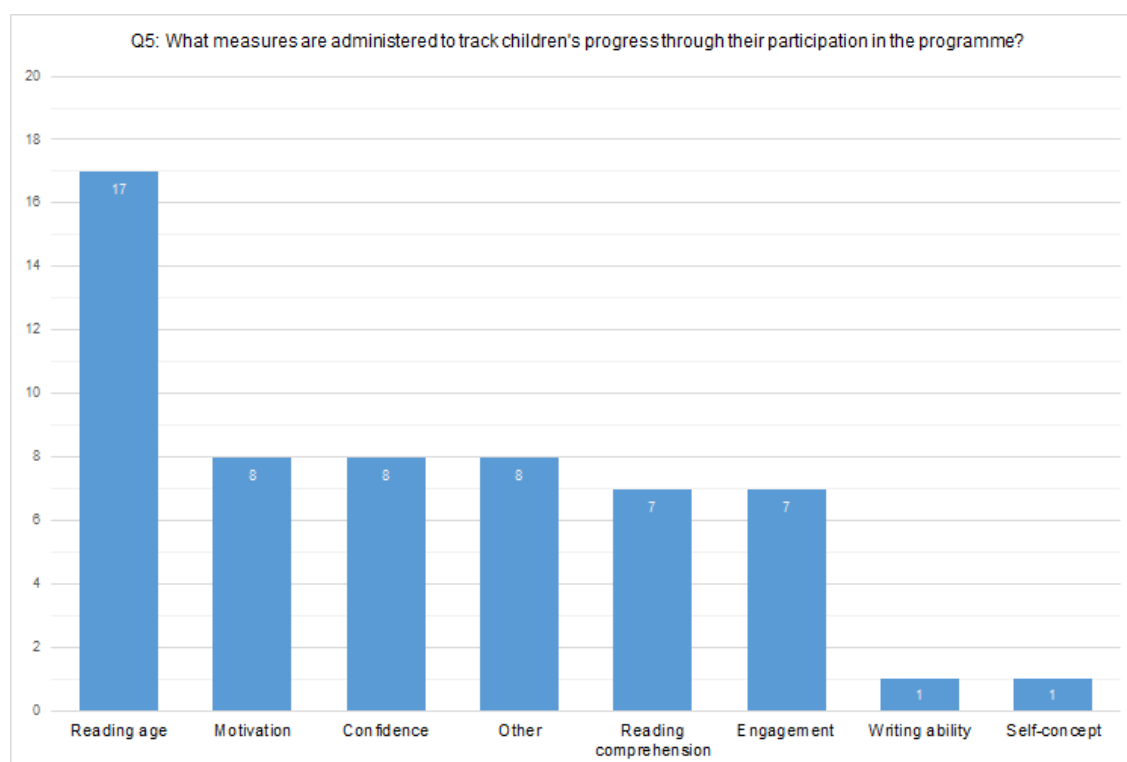
anticipated impact of increased interactions with adults and feeling more comfortable in social situations while another stated overcoming a fear of dogs as an expected impact.

One participant school specifically commented the Reading to Dogs programme was not being employed with a reading focus, as the school had other interventions designed to target reading.

These individual responses suggest an implied expectation that through improving motivation, confidence and engagement, children would enjoy reading and be more interested in books. By far the majority of schools reported anticipating that the Reading to Dogs programme would positively impact on children's emotional wellbeing, rather than their reading skills.

Schools were also asked what measures were administered in order to track children's progress through their participation in the programme. Responses are presented in ranked order in Figure 3.4b.

*Figure 3.4b: Graph depicting school responses to question 5 in ranked order*



Seventeen of the nineteen participant schools reported tracking children's progress, with regard to their reading age, through a range of measures, with thirteen schools naming specific assessment measures used to track children's reading. These assessments are listed alphabetically below:

Assessing Pupil Progress (APP)	Burt reading test
British Ability Scales, second edition (BAS II)	Hertfordshire reading test
National Curriculum levels	Neale Analysis of Reading Ability
Salford reading test	Schonell reading test
Suffolk reading scale	

A total of twelve schools also monitored either children's motivation, confidence or engagement, in relation to their participation in the programme. In the majority of cases this was measured informally, based on observations from school staff. Some schools also developed their own questionnaires, looking at children's wellbeing or pupil experiences and views of the programme. One school reported also using the Leuven scales to monitor children's wellbeing. Eight schools reported tracking other aspects of children's progress, through pupil progress meetings, as part of existing Pupil Premium tracking measures or changes in children's reading behaviours at home.

In addition to completing the structured telephone audit interviews, three schools provided data on the children's reading progress, as tracked by the schools, in line with their participation in the Reading to Dogs programme. In total, anonymised data for 89 children were gathered from the three schools. Raw data are provided in the CD Rom disc accompanying this thesis.

Children's reading ages were assessed by the school before (baseline) and after (post-measure) their participation in the Reading to Dogs programme, using norm-referenced standardised reading assessments.

Descriptive statistics for children's baseline and post-measure reading ages are provided in Figure 3.4c.

*Figure 3.4c: Descriptive statistics for baseline and post-measure reading ages*

	<b>Baseline reading age (months)</b>	<b>Post-measure reading age (months)</b>
<b>n</b>	89 children	89 children
<b>Mean reading age</b>	93.3 (7 years 9 months)	98.7 (8 years 2 months)
<b>Lowest reading age</b>	48 (4 years 0 months)	67 (5 years 7 months)
<b>Highest reading age</b>	151 (12 years 7 months)	160 (13 years 4 months)
<b>Standard Error</b>	2.55	2.51
<b>Range</b>	103	93
<b>Standard Deviation</b>	24.1	23.7
<b>Skewness</b> (measure of symmetry of data curve, zero is symmetrical)	0.63	0.94
<b>Kurtosis</b> (measure of shape of data curve, negative value indicates broad, flat peak)	-0.34	-0.11
<b>Confidence level 95%</b>	5.07	4.99

The mean baseline reading age was 7 years 9 months however these scores were widely spread (range = 103) varying from 4 years to 12 years 7 months. Post-measure reading ages were equally varied (range = 93) covering reading ages as low as 5 years 7 months to as high as 13 years 4 months, with a mean post-measure reading age of 8 years 2 months.

These scores cover a wide range of reading abilities. A child with a reading age of around 4 years would typically be able to name letters of the alphabet, correctly identify some letter-sound combinations, recognise a few familiar written words and write their own name.

Meanwhile a child with a reading age of around 7 years could be expected to independently read full sentences with appropriate emphasis and some

expression, using pictures and contextual clues to decipher unfamiliar words, and have a good understanding of what they have read.

In contrast, a child with a reading age of around 12 years should be able to accurately and fluently read a range of texts independently, demonstrating more complex comprehension skills, such as inference and deduction.

The duration of each child's participation in the Reading to Dogs programme varied substantially, ranging from 7 weeks to 13 months. To account for this, each individual child's increase in reading age (post-measure reading age less baseline reading age) was divided by the duration of their participation in the programme, providing a ratio gain score for each child.

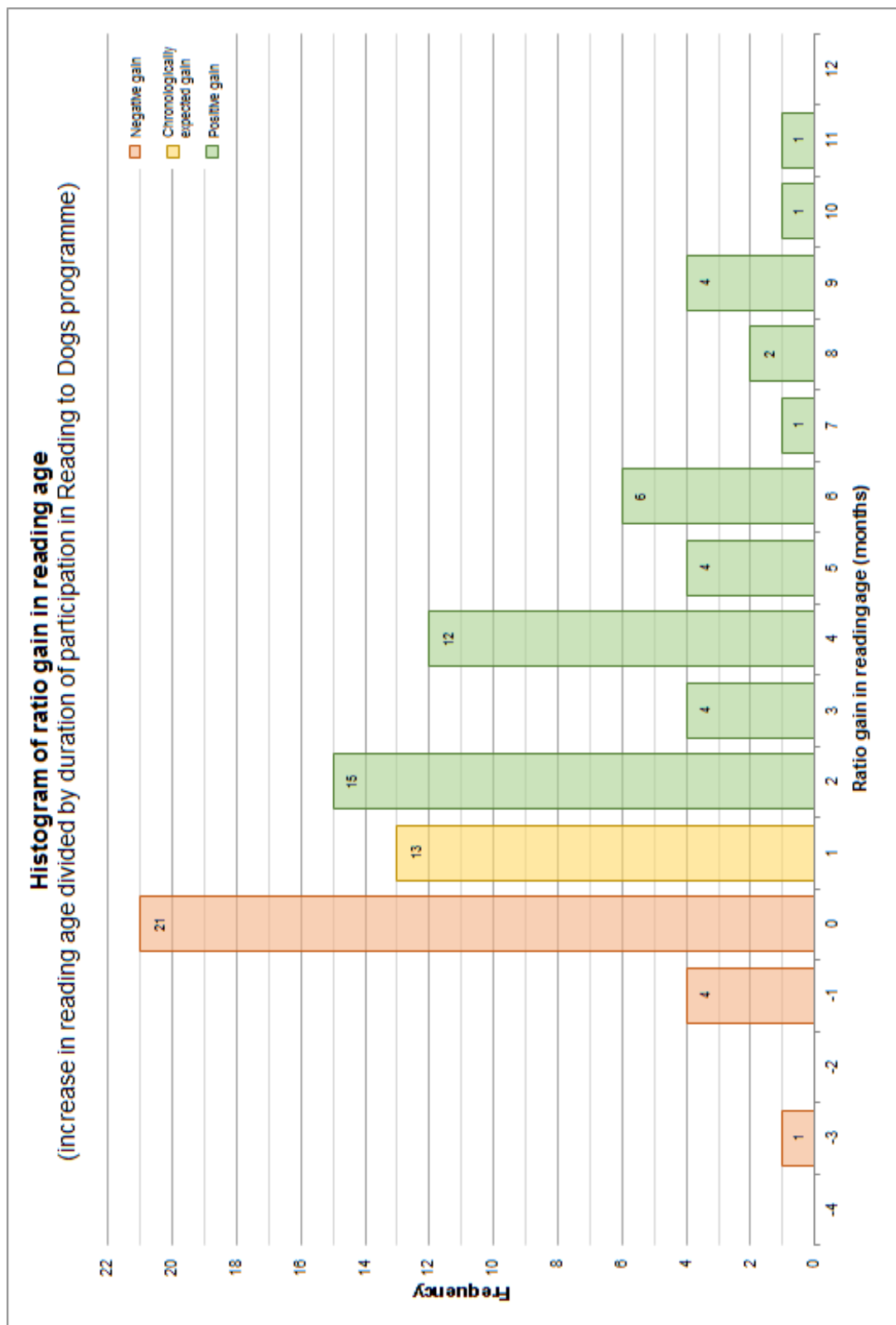
A ratio gain score of 1 would indicate that for each month of participation in the Reading to Dogs programme, the child increased their reading age by one month. This would be the chronologically expected gain. Similarly, a ratio gain score of 2 or higher would indicate the child had increased their reading age by more than one month, for each month of participation in the programme i.e. a positive gain. Meanwhile a ratio gain score of zero or a negative score would indicate that for each month of participation in the programme the child's reading age either did not increase or decreased i.e. a negative gain.

The 89 ratio gain scores obtained from the tracking data provided by schools are provided in Figure 3.4d and visually demonstrated by the histogram shown in Figure 3.4e.

*Figure 3.4d: Frequency of ratio gain in reading age*

Ratio gain in reading age	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12
Frequency	0	1	0	4	21	13	15	4	12	4	6	1	2	4	1	1	0

Figure 3.4e: Histogram showing frequency of ratio gains in reading ages





The individual columns of the histogram have been coloured to demonstrate whether the corresponding ratio gain score indicates a positive gain (green) the chronologically expected gain (orange) or a negative gain (red) in reading age.

The mean ratio gain score obtained in this sample was 2.34, indicating an average increase in reading age of 2.34 months for each month of participation in the programme.

As shown in Figure 3.4e, the majority of children to participate in the Reading to Dogs programme obtained a positive ratio gain score.

Of the 89 children included in this histogram, fifty obtained a positive gain score, with their reading age increasing at a rate greater than one month's reading age for each month of participation.

Thirteen children obtained a ratio gain score of one, indicating that for each month they participated in the programme their reading age increased by one month.

Twenty-six children obtained a negative gain score. Of these, twenty-one children scored a ratio gain of zero, indicating that for each month they participated in the Reading to Dogs programme their reading age remained the same i.e. did not increase. Four children obtained a ratio gain score of minus one, as their reading age decreased by one month for each month they participated in the programme. One child's ratio gain score revealed that for each month they participated in the programme, their reading age decreased by three months.

#### 3.4.1 Summary

Schools expected children's motivation, engagement and confidence would be positively affected by the Reading to Dogs programme. Most schools tracked

children's progress in the programme using norm-referenced, standardised reading assessments.

An analysis of 89 children's scores revealed an average increase of 5 months from their baseline reading age ( $M = 93.3$ ) to their post-measure reading age ( $M = 98.7$ ).

Reading ages were also presented as ratio gain scores, calculating the months of increase in reading age for each month of participation in the programme.

The mean ratio gain score was 2.34 months, denoting a positive ratio gain.

## **4. Findings: Phase 2**

### **Theory of Playful Reading**

This chapter presents the findings from the second phase of this research project. The second phase employed a grounded theory methodology to generate a substantive theory of Reading to Dogs.

Data from both phases of the research was analysed using the constant comparative analysis method, as outlined earlier in this thesis, to generate a theoretical explanation of Reading to Dogs. The substantive grounded theory is presented here.

As previously discussed in this thesis (see section 2.3.1), Glaser advocates incorporating data from a range of sources, including previously published research and other literature, into a grounded theory (Glaser, 2007). In accordance with this methodological approach, references are made throughout the substantive theory to research and literature pertinent to the theoretical concepts raised.

Playful reading was the core category to emerge from the data and as such constitutes the core of this substantive theory. In addition, four subcategories emerged: Child's Best Friend, Happy Capital, Genuine Listening and Real Reading. These subcategories both underpin and expand upon the core category of Playful Reading, as demonstrated in Figure 4.

The theory of Playful Reading, together with each of the four subcategories, is presented here together with references to appropriate aspects of the data and illustrative quotes.

Figure 4: Graphical representation of the core category and subcategories of the theory of Playful Reading



#### 4.1 Playful Reading

**Playful Reading** explains how the shift from being read to as a young child, to becoming an independent reader in school, presents challenges for children. As an intervention, Reading to Dogs recaptures the ‘playfulness’ in learning to read, helping children to reframe reading as a fun and enjoyable activity.

##### 4.1.1 Developmental Stages of Reading

In Early Years settings such as Nursery, children are encouraged to learn to read through play and other activities emphasising fun and enjoyment. Adults reading stories aloud to children is a key aspect of early reading experiences in these settings, however once children arrive at school they are required to demonstrate their reading skills by reading aloud to adults.

The shift from children being read books by adults, to children reading books to adults, can be challenging for some children. Children’s experience of reading is no longer focussed on fun instead involving time and effort, which impacts on their enjoyment:

*Jake: I just move into Reception and at Nursery you didn't do any lessons so um, all you, the teacher, they, I thought the teachers still read to you but no you have to read to the teachers sometimes*

*Researcher: Uh-huh*

*Jake: And so I didn't like it*

*(Jake, lines 342-350)*

In the early stages of reading development children are still learning to decode letters and sounds. In a survey shared by a school, children repeatedly reported they disliked reading, attributing this to a number of specific reading skills they found challenging, including sounding out, understanding hard words and remembering what they had read. In interviews, children also talked about disjointed reading and being muddled over words, causing them difficulty in following storylines.

As children progress through the education system, their reading experiences become increasingly formalised: children are given reading homework, asked to read aloud in class and periodically complete formal assessments of their reading.

#### 4.1.2 Reading Levels

The majority of primary schools also have a school reading scheme, in which books are sorted into progressive levels of difficulty and children move through the levels based on teacher assessments of their reading. Teachers and non-teaching staff regularly ask children to read aloud to monitor their reading and determine whether they should progress to the next level.

Reading levels are used by both children and parents as an indicator of children's ability and progress, often in comparison to their peers. When interviewed, several children commented on the negative emotions evoked by comparing their reading level to their peers, particularly when their own level

was substantially lower. Isla described being on a lower reading level than the majority of her classmates as “*really upsetting*”, while Claire captured a feeling of isolation:

*Claire: That um, that it just, I didn't want to be behind everyone, I wanted to be with everyone cos I was like, I wasn't with anyone, I was on 2...*

*(Claire, lines 296-297)*

Children's experience of reading in school is increasingly associated with a struggle to master the skills of decoding and comprehension, whilst simultaneously having their efforts appraised by adults and ranked against their peers.

#### 4.1.3 Reading as a Chore

The Matthew Effect (Merton, 1968) describes how individuals possessing a particular skill, status or attribute tend to increase this asset in a virtuous cycle of advantage and opportunity, whilst those lacking a skill, status or attribute become engaged in a vicious cycle of disadvantage and obstacles, unable to acquire the asset in question. With specific regard to reading, Stanovich (1986) claimed the Matthew Effect explained individual differences in the acquisition of literacy skills, based on children's early exposure to rich vocabulary and cognitively stimulating activities.

In the present research, children's struggle with their newly emerging reading skills, combined with experiences of reading in the more formal school context, negatively impacted on their enjoyment of reading. This generated the Matthew Effect of a negative cycle, whereby children dislike reading and become reluctant to read, further hindering their opportunity to develop their reading skills and increasingly reducing their desire to read. One parent described how, for their child, reading had become a “*chore*”.

The highest level of school reading schemes is usually referred to by children as 'free reader', reflecting the increased freedom of choice associated with this level, as compared to the restrictive selection on lower reading levels. Despite this perceived freedom, on attaining 'free reader' status, children are expected to read more complex and extended books. For children who do not enjoy reading the prospect of longer, chapter books is not necessarily an appealing one. Some children explicitly said they would prefer to remain on their current level as they were not interested in reading chapter books.

*Isla: I want to be a free reader but like there's, there's only really chapter books so I'd like to stay where I was cos I don't really like chapter books I like short books.*

*(Isla, lines 51-53)*

The Reading to Dogs programme interrupted this cycle by introducing an unconventional experience of reading into school, which recaptures the fun in learning to read. Parent comments shared by schools recognised a change in children's attitudes toward reading following the Reading to Dogs programme.

#### 4.1.4 Novelty

Reading to a dog is arguably an unusual event, particularly when contrasted with more formal learning activities in school. In response to the telephone audit conducted in phase one of this research, almost half of participating schools reported the programme's novelty was instrumental in their choice to introduce it to their school.

The novelty of reading to a dog was also remarked upon by children both in school survey responses and during interviews. As one child put it, when asked why they liked reading to the dog:

*Because it's time for me to read to a dog and I've never done it before.*

*(School F survey responses, lines 262-264)*

Some children also commented on the difference between Reading to Dogs and either reading to a person or more usual lessons in school, welcoming the break and enjoying the contrast. The originality of this approach to reading also was seen as beneficial in other ways. Ben spoke in detail about the impact of Reading to Dogs on his imagination, helping him better follow the story and inspiring him to be more creative.

*Ben: Yeah. The dog's very important. If you didn't have the dog, your imagination would be really dull.*

*(Ben, lines 205-206)*

#### 4.1.5 Reframing reading as playful

The unusual activity of reading to a dog, providing a relief from formal learning experiences, is both enjoyable and fun for children. The word 'fun' was persistently used by children when asked about their experiences of reading to a dog in interviews:

*Henry: And \*Dog\*, and reading's really fun.*

*Researcher: You keep saying fun, I wanna hear more about this fun. It sounds like that's quite important.*

*Henry: Mmm. Well because it's good to read to \*Dog\* and fun a lot so helps more people learn about more words and, and [sighs]*

*Researcher: What's fun about it?*

*Henry: Mmm. Mmm.*

*Researcher: [laughs]*

*Henry: [groans] I keep getting stuck.*

*Researcher: That's alright, I get stuck sometimes. Get an idea and then think I don't know how to say that. Sometimes I find it helpful to say it but to say it really messy but then at least I've said something and then I can try and make it less messy. So you could do that if you want, if that's helpful? I don't mind.*



*Henry: So, cos when it's fun it makes me feel happier and stroking \*Dog\* and reading fun books to \*Dog\* and a lot more reading and writing.*

*(Henry, lines 91-106)*

Reading to Dogs clearly provides children with an enjoyable experience of reading, different from the more formal and challenging experience of reading to an adult. The struggle children experience upon starting school and having to demonstrate their emerging reading skills to an adult is overturned by sharing a book with a dog.

Parents and children, both in surveys and interviews, talked repeatedly about the enjoyment children had while reading to the dog. In a school survey of parents' views, one parent remarked:

*\*Child\* now enjoys reading which is a transformation!*

*(School J parent comments, line 50)*

As children have more enjoyable experiences of reading with the dog, their enjoyment of reading also grows and they become more willing to read.

Several parents commented on their children's increased desire to read following the Reading to Dogs programme. Children also reported engaging in reading more often, and doing so by choice.

*Adam: I'm practising every day for my time to read to \*dog\* and I have so much fun.*

*(Adam, lines 83-84)*

Reading to Dogs enhances children's enjoyment of reading through a fun and novel experience, fostering a sense of playfulness. While specific definitions of playfulness vary, it is generally agreed as a mental attitude reflecting how an individual frames or approaches a task, usually involving pleasure, spontaneous

action or thought and, among children, suspension of the limitations of reality (Sanderson, 2010).

Adopting such an attitude of playfulness has been shown to benefit various aspects of well-being and development. Young adults who had a playful attitude experienced less perceived stress and employed more efficient coping strategies than their less playful peers (Magnuson & Barnett, 2013).

Children who practised a puzzle in a playful, rather than formal, context were more confident and motivated to experiment with a range of strategies, and performed substantially better on the subsequent task (McInnes, Howard, Miles, & Crowley, 2009). McInnes and colleagues (2009) also found that children who practiced in a playful context demonstrated a greater number of behaviours indicating positive emotions (e.g. smiling, cheering) and persisted even when they made mistakes.

Practising reading in a fun, playful context with a reading dog found similarly positive effects, with an average increase of five months' reading age found for a sample of 89 children who participated in the Reading to Dogs programme (see section 3.4).

This research shows that while reading to a dog, children encounter a fun, enjoyable atmosphere which encourages them to be more playful, leading to increased motivation and engagement with reading.

## **4.2 Child's Best Friend**

Just as dogs are often referred to in popular culture as 'man's best friend', the subcategory of **Child's Best Friend** emerged as a core element of **Playful Reading**.

**Child's Best Friend** captures the close emotional bond children develop with the dog they read to. This is explained in terms of children possessing a predilection toward animals, and perceiving their relationship with dogs as non-hierarchical, allowing the potential for friendship.

Building a meaningful connection with the reading dog facilitates the creation of a relaxed, informal environment for children to develop their reading skills in.

As already described, this atmosphere is a central aspect of **Playful Reading**.

#### 4.2.1 Emotional Connection

Children form meaningful relationships with the dogs they read to. In both individual interviews, school surveys and comments from parents it was clear that the children had become close to the reading dogs. The dogs involved in Reading to Dogs are attributed the same status as a friend, or even family, and have significance for the children who read to them:

*Adam: And he really likes me and I really like him. I think I could improve with \*dog\* around me. When I said it, like, he'll be there for, like every corner I go read to him or like every day I go read to him, I get really excited, every day I do it.*

*(Adam, lines 358-361)*

During interviews, many children asserted their friendship with the dog, talking about their relationship in terms of shared play, jokes and cuddles. Several children also referred to other friendships with their peers, seeing their friendship with the reading dog as comparable.

Although including a playful aspect, these relationships also involve a deep connection between the child and the dog and several children talked about the support they received from the dog.

The relationship between the children and the reading dogs is seen as a reciprocal one, mutually beneficial for the child and dog. Children believe the reading dog values them and appreciates their actions. Just as reading to the dog is enjoyable and helpful for the children, reading a story aloud is also enjoyed by and helpful to the dog, as the dogs are unable to read for themselves:

*Henry: Cos he likes me, likes read- likes me reading to him and, and, mmm well*

*Researcher: Is it, is reading to \*dog\*, helpful to \*dog\*?*

*Henry: Mmm yes.*

*Researcher: Is it? How?*

*Henry: Because, instead of \*dog\* reading it's me someone reading the story to \*dog\* so if \*dog\* was a person and he couldn't read the words he, someone else could read the story to him, and, there's nothing else to say*

*Researcher: Ok. So, I wanna check that I've understood. You're saying that, when you read to \*dog\* and you read him a story, that helps \*dog\* cos then he gets to hear like the story?*

*Henry: Yeah in case he gets stuck on, in case he gets on the last word and he thinks oh yes I'm gonna be at the end and then he gets stuck on one of the words.*

*(Henry, lines 185-198)*

The relationships between the dogs and children involved a mutual liking for one another. Much like friendships with peers, the children reported being happy to see the dogs and the reading dogs' behaviours suggesting they were also pleased to see the children.

Although research has not found a correlation between dog owners' perceptions of closeness to their dog and the dog's behaviour when reunited after a period of separation (Rehn, Lindholm, Keeling, & Forkman, 2014), there is evidence that dogs experience pleasure in the presence of familiar humans.

When reunited with a familiar person (not an owner) after a period of separation, dogs' cortisol levels (hormone indicating stress) reduced and oxytocin levels (hormone indicating contentment and calmness) increased (Rehn, Handlin, Uvnäa-Moberg, & Keeling, 2014). When the familiar person greeted the dog with both verbal and physical contact, these physical responses were sustained.

Several children spoke about feelings of loss when their participation in the Reading to Dogs sessions came to an end. The children talked about how they would miss the dog but felt their connection was significantly strong that it would persist.

#### 4.2.2 Human-Animal Bond

No agreed definition of human-animal attachment exists (Fine & Beck, 2010), with suggestions ranging from inter-species hierarchical relationships to an emotional bond between owner and pet (Crawford, Worsham, & Swinehart, 2006). A growing body of research has explored the connection between humans and companion animals (i.e. pets), applying aspects of attachment theory (Bowlby, 1988) as a conceptual explanation of the human-animal bond.

While authors have written extensively about the bond between animals and humans (Fine, 2010; Pavlides, 2008; Pichot and Coulter, 2007; Serpell, 1986), this has been almost exclusively with regard to companion animals (i.e. pets) rather than the volunteer and trained animals used in AAI programmes such as Reading to Dogs.

Given the relatively short periods of time children spend with reading dogs, contrasted with the more continuous experience of pet ownership, it is unclear whether these relationships are comparable. Bagley et al. (2005) found that

attachments to pets became stronger over the period of pet ownership (same or different pets) and with increased number of pets.

In addition, much of the existing literature and research into the human-animal bond focusses on adults and their relationship to dependent companion animals (e.g. Barba, 1995, cited Fine and Beck, 2010). As Reading to Dogs is a school based intervention programme for children, rather than adults, involving visiting reading dogs, rather than children's own companion animals, the application of these writings is limited at best.

#### 4.2.3 Power Balance

The power dynamic between animals (dogs) and children is relatively equal, unlike that between a child and an adult, such as a class teacher. This non-hierarchical relationship between dogs and children allows for genuine friendships to be formed between the two. Children talked in interviews about dogs and other animals as friends and potential playmates:

*Henry: Cos I haven't got no brothers and sisters, I have like dogs and a goldfish so they could like be my friends and I could play with them a lot.*

*(Henry, lines 215-216)*

Children's attitudes toward animals change as they grown into teenagers and then adults, altering their relationship with animals. A friendship with a reading dog is accepted as appropriate for children, given children's apparent natural affinity for animals. As children mature into adolescence however, they are perceived to outgrow their animal playmates. Reading to Dogs is accordingly better suited to younger children, with teenagers and adolescents expected to read independently:

*Jake: And, and um, well I don't think you read with, I don't think they should read with \*dog\* there cos then um, cos you're a little bit older like teenagers.*

*Researcher: You think that's too old?*

*Jake: Yeah because now you're like, you're well you're in some kind of schools you bring your own book so um yeah.*

*(Jake, lines 530-535)*

#### 4.2.4 Animal Magnets

Children are interested in and curious about animals, seemingly drawn to animals like magnets. Parent comments, shared by schools, frequently referred to children's interest in animals. Many of the children interviewed spoke about their own and others' pets, favourite animals and proudly shared a variety of factual information they knew about different animals. Several children also mentioned future aspirations to work with animals.

Wilson (1984, cited Melson & Fine, 2010) proposed the concept of "biophilia", claiming that our evolutionary past has created an innate affinity for lifelike processes and nature in humans. This preference for and attendance to animals supposedly had evolutionary benefits and advantages e.g. detecting predators, identifying edible prey. Recent research has clearly demonstrated that newborn infants show a preference for visually attending to human or animal images (DeLoache, Pickard, & LoBue, 2011).

In addition to the instinctive attunement to animals described by the biophilia hypothesis, children also like animals, and ascribe value and status to them:

*Researcher: Why else are animals important? What do you think?*

*Gloria: Because we like them.*

*Researcher: And that makes them important?*

*Gloria: [nods]*

*(Gloria, lines 113-116)*

In interviews children were clear that animals are important, often citing examples of assistance animals and particular roles that animals fulfil in the natural world. Animals are also seen as having an intrinsic value to children, beyond their 'usefulness'.

In interviews the children explained how the value of animals is more pronounced among children than adults. Animals and children share an interest in play, and children have sufficient freedom from adult responsibilities and obligations to pursue play:

*Researcher: Do you think adults are interested in animals?*

*Isla: Not as much as children. [laughs]*

*(Isla, lines 215-216)*

Children's inexperience with animals and lack of knowledge (compared to adults) was also seen as adding to animals' importance. The prevalence of animals in society, as wild animals, pets and assistance or working animals, creates a need for children to understand and familiarise themselves with animals both for themselves and their future children.

### **4.3 Happy Capital**

Another subcategory of **Playful Reading** to emerge was **Happy Capital**, explaining how children's positive and calming experiences of reading to the dog increased their resilience to cope with reading.

The ordinarily stressful experience of reading is mediated by the calming effect of the presence of a dog during sessions. Physically touching and stroking the dog also relaxed the dog, which further enhanced the children's relaxation through unconscious mirroring, described here as reciprocal soothing.



Reading to Dogs sessions are also enjoyable experiences for children which elicit a range of positive emotions. These feelings build **Happy Capital** for children, a bank of positive emotions and enjoyable memories, available for children to recall and draw upon in later reading experiences.

**Happy Capital** increases children's resilience to the stressful experience of reading and works to break the cycle of negative associations with reading described in **Playful Reading**.

#### 4.3.1 Reciprocal Soothing

Children experience reading as stressful, particularly so when reading aloud to an adult. In interviews children talked about feeling anxious and frustrated when reading to adults and the negative impact this had on their ability to read:

*Researcher: What about if you had been reading with a person instead of a dog?*

*Claire: Then I'd be a bit, mmm, um, more nervous so I would be like, I'd be nearly every word stuck. Because I'm more worried than reading.*

*(Claire, lines 173-176)*

This was contrasted with their descriptions of reading to the dog, which invariably referred to feeling relaxed and calm.

The mere presence of a dog while reading is calming for children. Previous researchers have found the presence of a dog reduced children's heart rate and blood pressure while reading or speaking to an adult (Friedmann, Katcher, Thomas, Lynch, & Messent, 1983). In the present research, children explained during interviews that dog helped them to feel calmer and more relaxed while reading.

Fiona spoke in detail about the physical manifestations of her stress and anxiety whilst reading to a person, before contrasting this with the experience of reading to a dog and explaining how this helped her to relax:

*Fiona: And when I read something to them my mouth goes all watery.*

*Researcher: Why do you think that happens?*

*Fiona: I'm not sure.*

*Researcher: Not sure.*

*Fiona: Just does.*

*Researcher: What does it feel like when you read to a somebody?*

*Fiona: I'm not sure it just, my, my heart thumps more and I read, I feel really scared that they might laugh at me. I'm not sure why, just is.*

*Researcher: Oh, that doesn't sound very nice.*

*Fiona: But with dogs, they can't talk or laugh or anything, they just tilt their head and I like that.*

*Researcher: You like that? Is that helpful when they do that?*

*Fiona: Yeah.*

*Researcher: How? How is it helpful? How does it help?*

*Fiona: Mmm. It makes me feel more comfortable. So in the future when I have to read to other people, if they're quiet it might make it better. It helps me, like, read to other people easier cos it's hard.*

*(Fiona, lines 37-54)*

The calming effect children experience from reading to a dog is further enhanced physical contact with the dog, touching and stroking them during the session.

Physical contact, particularly during stressful situations, stimulates the release of calming, relaxing hormones and endorphins in both animals and humans (Walker & McGlone, 2013). Some authors have further suggested that humans

particularly rely on this form of nonverbal communication (i.e. as reassurance) when experiencing stress (Hertenstein, Verkamp, Kerestes, & Holmes, 2006).

School responses to the audit in the first phase of this research indicated that, in the majority of Reading to Dogs sessions, children would pet the dog. This behaviour occurred throughout the session although it was more prevalent at the start and end.

Dogs' physiological responses to people have been found to depend on the experiences associated with that individual, i.e. whether to anticipate a pleasant, neutral or unpleasant event (Lynch & McCarthy, 1969). Lynch and McCarthy (1969) found that dogs' heart rates were significantly and consistently lower when a person associated with a pleasant event entered the room, than a person associated with an unpleasant event.

Dogs' heart rates have also been shown to reduce over time in response to physical contact with people, particularly stroking, suggesting this contact has a relaxing effect upon the dog (McGreevy, Righetti, & Thomson, 2005). By repeatedly and consistently stroking the dog during reading sessions, the children became associated with a positive, relaxing experience for the dogs. This association further strengthened the physiologically calming effect of the children on the dogs.

The unconscious imitation of others' nonverbal behaviours and affectations (i.e. posture, gesture, emotion and mood) in a range of social interactions has been shown to both facilitate rapport and to be increased by interpersonal closeness (Lakin, Jefferis, Cheng, & Chartrand, 2003). As the dogs relax in response to being stroked, the children unconsciously mirror their calm, relaxed affect, leading to them feeling more relaxed in turn.

Furthermore, as research has found dogs to be highly sensitive to human actions and intentions (Wynne, Dorey, & Udell, 2011), the dogs are likely to have been attuned to the children's increased feelings of calm and relaxation.

#### 4.3.2 Positive Experiences

Children enjoy spending time with the reading dog, experiencing a range of positive emotions such as happiness, fun and relaxation. These positive feelings were repeatedly mentioned by children in interviews and survey responses, as well as parents' comments.

Positive Psychology concepts such as positive emotions, happiness, hope and coping (Boniwell, 2008) permeate AAI, with animals' abilities to inspire hope, provide support, encourage social interaction and stimulate talking (both about and to the animal), together with pleasure derived from the presence, interaction with and petting of animals all featuring prominently in the literature (Fine and Beck, 2010).

Through the elicitation of positive emotions and the enhancement of self-esteem and self-efficacy, animals are believed to promote positive change in individuals (Kruger and Serpell, 2010). Pichot and Coulter (2007) advocate the inclusion of animals into Solution Focused Therapy (de Shazer, 1985 cited in Pichot and Coulter, 2007), reasoning that this serves to empower the client, encourage a positive focus, ensure purposeful interaction and promote respect for the individual and for change.

The children spoke in interviews about how the positive feelings of calm and happiness they experienced whilst with the dog remained with them long afterwards. Donna particularly spoke about the happiness she experienced with the reading dog, enjoying the dog's behaviour and physical contact with

her. These incidents made her feel happy as she read, meaning that she became stuck less frequently and was better able to continue reading. Donna was clear about how these experiences helped her reading:

*Researcher: Would you say that reading with \*dog\* and \*dog\* made your reading better?*

*Donna: Yeah.*

*Researcher: How? How did it make your reading better?*

*Donna: Um, cos like the dogs used to like get me even happier, then when I read to the teachers it made me happy as well, like remembering the dogs.*

*Researcher: Oh ok. Can you tell me more about this feeling happy?*

*Donna: Um. When like \*dog\* would come in, \*dog\* was a sausage dog and then, when he tried to jump up that's all I kept remembering. He kept trying to jump up but he couldn't reach me. Like my knees, and then he went, so I, he made me bend down and get his, so he could sit on my lap.*

*Researcher: Aww, how sweet! [laughs] Ok.*

*Donna: And \*dog\*, was like, kind of big but, and she used to put her, like her, paws on my leg and she used to jump up and sit on my lap. So like when I read, I would remember it like remember it and like it made me happy*

*Researcher: So you would memorise and remember what it felt like?*

*Donna: Yeah.*

*(Donna, lines 70-89)*

Frederickson's broaden-and-build theory of positive emotions (2001, cited in Hefferon & Boniwell, 2011) explains that as we experience positive emotions, our capacity to generate alternative thinking patterns is increased, leading to the development of personal resources (intellectual, social and psychological) which in turn generate further positive emotions.

This increase of personal resources was also referred to by the children in interviews. Some spoke about being more able to overcome negative emotions

such as sadness and disappointment, while other children's self-belief increased over the time they spent reading to the dog:

*Adam: I was really happy with myself, and I knew I could do this 'cos the dog believed in me, Mrs Xxx believe in me, my parents, my friends, my teacher, and myself. I could believe in myself. Especially \*dog\* and people who are my friends said "I can believe in you that you can do this".*

*(Adam, lines 103-107)*

#### **4.4 Genuine Listening**

Another subcategory to emerge from the data was **Genuine Listening**. This related to dogs' behaviours during reading sessions.

The children received the dog's full attention, without any interruptions or distractions. The dogs listened to the children reading with no agenda (e.g. correcting mistakes) and did not pass any judgement on children's reading.

These listening behaviours were seen as characteristic of the reading dog's trained behaviour, as compared to pets and other untrained animals who were unable to display **Genuine Listening**.

##### 4.4.1 Focussed Attention

Children are frequently disturbed while reading to an adult, often to either offer the child assistance, or as a result of external interruptions. Reading dogs give children their full attention as they listen to them reading.

The adults to whom children read have various responsibilities that can impinge on their capacity to focus on children's reading. By comparison, reading dogs have no such obligations and are free to listen to children as they read.

School classrooms are busy environments and teachers have to manage the needs of large numbers of children in addition to those they are hearing read.

Even the noise of other children sharing books and engaging in learning activities can be disruptive for those trying to focus on reading. Similarly, at home, parents have household duties, work related tasks and other demands on their attention.

In the structured telephone audit, schools reported children talking and reading directly to the dog, rather than the adult, and explaining to the dog what they had read. This behaviour clearly demonstrates the children believed the reading dog was the audience for their reading.

In individual interviews children spoke about the dogs' focussed attention on their reading and how this contrasted with reading to adults. Ben was particularly outspoken on this subject, feeling the dog prioritised and attended to his reading more successfully than adults in his life:

*Ben: I just want someone to sit next to me, just read to me. Um, dogs, they're perfect to read to. People, they would not sit next to you for five minutes. My Mum and Dad, they're sitting there, like this "blah blah blah, oh sorry, just got to get the phone." Then, an hour later, they come back and I'm like... I was waiting for a long time.*

*Researcher: Ok...*

*Ben: Um... The dogs, they just sit there. Be still. They don't need to go on the computer or just like, email someone, saying "I gotta do this job, I gotta do this job" like that.*

*(Ben, lines 40-49)*

While the non-verbal behaviours among humans which indicate attentive listening are well documented (Egan, 2010), dog's nonverbal listening cues are less clear. In interviews children talked about a number of behaviours that indicated the dogs were listening to them read, including: being still, lying down, going to sleep, turning or tilting their head in response to the child's voice, and touching the children (e.g. resting their head or paws on the children):

*Donna: Yeah. It helps me like kind of read, like when the dogs put up on me and then like I know that they're listening.*

*Researcher: Oh ok. So it's a way for you to know that they're listening to you?*

*Donna: Yeah.*

*(Donna, lines 262-265)*

#### 4.4.2 Non-Judgemental

As previously described in the core category of **Playful Reading**, children's experiences of reading aloud to adults, especially in school, involves continuous judgements of their reading ability. This appraisal creates anxiety for children and impedes their ability to demonstrate the very skills adults are watching for.

Although interjections to support children's reading, for example in decoding words, may be well intentioned, children were clear that these were not always welcomed. In response to school surveys, children reported finding reading to the dog as helpful because no one "*interfered*". As one child put it:

*I could try my hardest without people helping or saying anything.*

*(School F, survey responses, line 45)*

In response to the structured telephone audit in phase one of this research, only a single school reported an adult supporting reading as featuring in a typical Reading to Dogs session. While adults asked children questions and talked about reading, this involvement is not as direct.

Several children commented on the dogs' lack of judgement of their reading, finding relief from the "*worry*" of how others judged their reading or being "*moaned at*" for making mistakes.

Animals are seen by some (Fine and Beck, 2010) to demonstrate the Humanistic (Rogers, 1951 cited in Atkinson et al., 2000) values of unconditional positive regard, authenticity and non-evaluative empathy (Atkinson et al., 2000).



Adopting an attitude of unconditional positive regard (consistent acceptance of people as they are, without additional stipulations) provides the individual with a secure psychological base from which they are able to develop (Wilkins, 2000).

By listening to the children read without any agenda (e.g. to assess their reading level), the dogs demonstrate unconditional positive regard for the children:

*Researcher: So it sounds like you're saying that, because \*dog\* was a dog, that meant that if you made a mistake, \*dog\* wouldn't laugh or you or tell anybody.*

*Claire: He wouldn't do anything.*

*Researcher: Wouldn't do anything? Ok. What about if you got things right, you didn't make a mistake, what was it like then?*

*Claire: Um, I'd be very happy... and um, no one would tell anyone or laugh.*

*(Claire, lines 55-61)*

The dog's attitude and response to the children did not change dependent on the level of fluency or accuracy in the children's reading, allowing the children to feel secure with the dog.

#### 4.4.3 Qualified Dogs

Reading dogs are trained to provide children with focussed, non-judgemental attention as they read. These dogs also possess particular characteristics that qualify them as suitable reading dogs.

As a species, dogs were seen as well suited to being reading partners, as they are domesticated (unlike foxes or wolves), are not too "*fidgety*" (unlike hamsters) and are able to physically interact with the children, for example by touching or licking them (unlike larger animals such as sheep or horses).

Several of the children compared reading to their own pets and the reading dogs, finding their pets unable to demonstrate the genuine listening skills they valued:

*Researcher: Like, um, what is it that \*dog\* does that means he's better at listening, that your dog at home doesn't do?*

*Fiona: He just sits there and like stares at me when I talk to him, and when I say things in a different tone he always puts his head like that*

*Researcher: To the side?*

*Fiona: Yeah. Cos he doesn't know what I mean and he thinks it's funny.*

*Researcher: \*dog\* does that? Ok but what about your dog at home, what does your dog at home do?*

*Fiona: Well, he kinda does the same but only to my Mum because, as I told you, he, I never get to finish the sentence.*

*Researcher: Why not? What happens?*

*Fiona: He prob- he just runs away. [laughs]*

*Researcher: [laughs]*

*Fiona: I don't think he's interested.*

*(Fiona, lines 17-30)*

The particular quality of the dogs' listening, as already described, was attributed by children to the dogs' training as reading dogs. In interviews, several children made reference to the dogs' trained status, citing specific examples of the dog's behaviour which demonstrated their qualified status:

*Researcher: If \*dog\**

*Henry: Yeah*

*Researcher: had been a different dog. Y'know, a different dog, not \*dog\*, d'you think it would've been as good?*

*Henry: Mmm no he would've, he wouldn't have been a good a listener, but some dogs do what they're told and if \*dog\* wasn't a good listener that means some he would be a really good reading dog to read to.*

*Researcher: So they've gotta be good listeners?*

*Henry: Yeah. So he would keep getting up and, keep getting up and drinking his food and eating when I'm reading the story.*

*Researcher: Ok.*

*Henry: So and he would just keep getting up and walking around. So if \*dog\*, like \*dog\*'s a reading dog, he doesn't do nothing soon, soon as you start reading \*dog\* sits down and lays and then, when I stop reading and I go \*dog\* starts trying to run out the room.*

*(Henry, lines 169-183)*

The suggestion that reading dogs are trained to suppress certain behaviours which could interfere with children's reading (e.g. getting up and walking around) is plausible. Dogs' behavioural and physiological responses to a potentially emotionally distressing situation (introduction of an unfamiliar human whilst separated from their companion human) were compared for pet dogs, trained guide dogs and trained custody dogs (Fallani, Previde, & Valsecchi, 2007). Although experiencing the same level of physiological response (increased heart rate) as the pet dogs, guide dogs were able to resist the proximity seeking behaviour displayed by the pets.

Children also attributed a certain status to the role of reading dog, seeing this as comparable to other assistance animals, such as guide dogs. Reading dogs perform a recognisable role of listening to children, for which they are uniquely qualified.

*Researcher: Listening to you. Is that an important job?*

*Gloria: Yeah.*

*Researcher: Is it? Ok. How come? How come that's important?*

*Gloria: Because it's their job to listen so they can hear what we see and say.*

*Researcher: Ok. Could a person do that job?*

*Gloria: Yes but they need to write it down cos um dogs have got, dogs can hear more than we do, they can remember.*

*Researcher: Got better memory?*

*Gloria: [nods]*

*Researcher: So are dogs better at listening to people than people are?*

*Gloria: [nods]*

*(Gloria, lines 177-187)*

## 4.5 Real Reading

The final subcategory which emerged was **Real Reading**. **Real Reading** explains a self-perpetuating cycle of reinforcement as children see demonstrable progress in their reading both through the application of their increasing literacy skills and in others' recognition of their growing skills.

### 4.5.1 Making Progress

Children develop their literacy skills by participating in the Reading to Dogs programme. Reading scores shared by schools in phase one of this research showed that for each month of participation in the programme, 15% of children increased their reading age by a month, with an additional 56% of children increasing their reading age by two or more months for each month they participated in the programme. Comments from parents and children shared by schools noted that children had progressed through the school reading levels and become more fluent in their reading:

*I used to get lots of words wrong, now flowing along. Because it's slow and words can get into my head*

*(School F, survey responses, lines 284-285)*

Children's responses to school surveys also included children's recognition of the developments they had made in their wider literacy abilities, including improvements in their imagination and writing skills.

In interviews, children recognised the importance of reading as a skill in itself and its connection to other aspects of literacy. Children talked about having more ideas for writing, increasing their vocabulary and other applications of their new reading skills:

*Henry: So, cos when it's fun it makes me feel happier and stroking \*dog\* and reading fun books to \*dog\* and a lot more reading and writing.*

*Researcher: Lot more reading and writing?*

*Henry: Mmm. So when I write I know more words to put in my writing. So when I read I can put more words in my stories and my books and everything.*

*(Henry, lines 102-107)*

#### 4.5.2 Motivation

These developments in reading and various facets of literacy help to further engage the children in reading. Children spoke about having more interest in reading and finding more books and stories to enjoy as they progressed. As children use their new literacy abilities in various contexts they recognise their own progress, bolstering their confidence in their reading ability:

*Researcher: How do you feel about reading?*

*Donna: Um it makes me feel better when I read because like at home when I get letters from like my friends and that I know how to read.*

*(Donna, lines 169-171)*

The application of new literacy skills generally, and reading skills specifically, builds children's belief in their abilities and encourages persistence.

Dweck's (2012) theory of motivation explains how an individual's mindset affects their motivation when performing a task: an individual with a fixed mindset believes ability is set and acts to either avoid demonstrating their inability (failure) or to assert their ability, whilst an individual with a growth

mindset attempts tasks in order to expand their existing skillset and develop new abilities (mastery).

Children develop their reading ability while reading to the dog, and receive reinforcement for their efforts to master the skills of reading in recognition both from adults and themselves (in applying their skills). This supports the children to develop a growth mindset (Dweck, 2012), whereby practising reading is no longer perceived as a potential challenge to their lack of skills, rather an opportunity to learn and develop further.

During interviews, several children spoke of targets they set themselves once they recognised their progress reading with the dog:

*Ben: Um, well, it was because I really wasn't good, as I said, so... So, when I actually read to \*dog\* it just got better and better and better and better, so I got to that goal, when I said "I can read to anyone now, I can reach that goal" and I did.*

*(Ben, lines 99-102)*

This change in motivational attitude is reinforced by further experiences of success and progress. In this context, school reading level schemes provide a useful tool to help children monitor their development. Children spoke in interviews about their motivation to further improve their reading and progress through their school reading levels, even after finishing their participation in the Reading to Dogs programme.

Before reading to the dog, Claire did not practice reading at home and was nervous about reading aloud to adults however her experience with the dog clearly changed this mindset:

*Claire: Because when I finished, reading with \*dog\*, I um, may, I thought um that it would be harder to move up because um, I'm like reading, I think it was twice a week with*

*\*dog\* so, I thought that I might do it every night so I can catch up with everyone.*

*(Claire, lines 270-273)*

#### **4.6 Summary**

The Theory of Playful Reading is a substantive grounded theory of the Reading to Dogs programme, comprising the core category of Playful Reading and four subcategories: Child's Best Friend, Genuine Listening, Happy Capital and Real Reading.

Playful Reading explains how, as children enter mainstream school, their experiences of reading become more formalised and less play oriented. The challenge of developing reading skills and continuous assessments negatively impacts on children's enjoyment of reading and consequently their desire to read, creating a vicious cycle. The novelty and fun involved in Reading to Dogs evokes a playful attitude in children toward reading, increasing their motivation and engagement.

*Researcher: How do you feel about reading?*

*Henry: Er, really good.*

*Researcher: Really good. How come?*

*Henry: Because it's reading to a dog instead of just reading.*

*Researcher: Is that different then?*

*Henry: [nods]*

*(Henry, lines 53-58)*

The subcategory of Child's Best Friend explains the close relationships children build with their reading dog and the emotional support they receive from this connection. Building on the biophilia hypothesis (Melson & Fine, 2010) which describes children's predisposition for attending to animals, Child's Best Friend

explains the value children ascribe to animals and the affinity they feel with dogs as friends and playmates.

*Adam: It's like the time of my life reading to \*dog\**

*(Adam, lines 25-26)*

The subcategory of Happy Capital expands upon the feelings of fun and enjoyment underpinning Playful Reading. Both the dog and child experience physiological calming effects (reciprocal soothing) as the child reads, which is enhanced by the physical contact as the child strokes and pets the dog.

The positive emotions children experience in Reading to Dogs develops their resilience for later reading experiences with others and, in accordance with the broaden-and-build theory (Hefferon & Boniwell, 2011), leads to further positive emotions.

*Fiona: It just um, gives me a bit more confidence. Although my mouth goes watery my heart doesn't thump as much because, I've had that experience to read to a dog so that, it kind of makes it easier*

*(Fiona, lines 67-69)*

The subcategory of Genuine Listening explains how dogs provide children with a focussed and attentive audience. By listening to children's reading without judgement, the dogs demonstrate unconditional positive regard (Wilkins, 2000), for the children, allowing them to feel secure as they read. Dogs are especially suited to this role, with their training providing the necessary skills to demonstrate Genuine Listening.

*Ben: Dogs, they're perfect to read to*

*(Ben, line 41)*

The subcategory of Real Reading explains how children's confidence is increased as they make demonstrable progress in their reading abilities and



find real applications for their growing literacy. The children develop a growth mindset (Dweck, 2012) to their abilities and are motivated to continue reading both independently and with the dog.

*Jake: I still want to do it.*

*(Jake, line 6)*

The quality of this substantive theory is discussed, together with the implications of Playful Reading, in the final chapter of this thesis.

## **5. Discussion**

### **5.1 Commentary on Findings**

The present research employed a two phase, sequential, mixed methods design in order to address two research aims. The findings of each phase of the research are discussed here.

#### **5.1.1 Phase 1: Structured Telephone Audit Interview Findings**

The first phase of the research aimed to audit current practice with regard to the Reading to Dogs programme in primary schools within the local authority.

Structured telephone audit interviews were completed with nineteen schools in the local authority, with additional anonymised reading scores for 89 children shared by three of these schools.

Chapter 3 of this thesis provides a detailed presentation of specific findings for the four aspects of school practice investigated by the audit: background to the programme (see section 3.1), operation of the programme (see section 3.2), behaviours in programme sessions (see section 3.3), and impact of the programme (see section 3.4).

A discussion of key findings, together with limitations of this phase of the research, is presented here.

##### **5.1.1.2 Scale of Reading to Dogs in the Local Authority**

Reading to Dogs is arguably a minority programme, involving almost 600 children from a small proportion (4%) of primary schools in the local authority, since its introduction in 2010. While not all schools within the local authority were contacted to verify whether they had participated in the Reading to Dogs

programme, reasonable steps were taken to identify schools to participate in the audit (see section 2.4.2).

After the initial volunteer handler and reading dog became unavailable, the programme ceased to be actively promoted within the local authority and nine of the original nineteen schools were unable to continue delivering the programme. Of the ten schools to continue delivering the programme, several had implemented creative solutions in order to do so (e.g. using school rabbits while seeking a replacement reading dog) and many reported having delivered the programme for over 2 years.

Schools were invariably enthusiastic about the programme, attracted by the novelty of its approach and, where unable to offer the programme at present, schools were keen to find alternative provision and resume Reading to Dogs in the future.

#### 5.1.1.2 Reading to Dogs Sessions

Schools typically appoint the SENCo or Literacy co-ordinator to oversee the Reading to Dogs programme however, in almost half of schools, weekly sessions were delivered by the dog owner alone.

Schools reported that children clearly identified the dog as their reading audience (rather than the adult present), often taking time to talk to the dog and explain their reading. Adults present during sessions were frequently silent or used the dog to indirectly ask children questions about their reading. Offering children support with reading skills during the session was only mentioned by a single school in the audit. The audit also highlighted the prevalence of interactions with the dog, with all schools reporting children would stroke the dog during a typical session and often give the dog a treat.

Given the high level of children's interactions with the dog during sessions, the presence of the dog owner (or another suitable dog handler) is clearly necessary to supervise these interactions. As the children reportedly focussed on reading to the dog, rather than the adult, and since directly addressing reading skills did not typically feature in sessions, it is unclear whether the presence of member of school staff (e.g. a teaching assistant) would be beneficial and what role they would take.

The audit also identified variation in practice, even within schools, although this was not fully reflected in the audit responses. The structured nature of the audit had the effect of restricting schools' responses, and many schools commented that describing a 'typical' session was challenging, as different features would be included to a greater or lesser extent depending on the individual needs of both the child and dog.

#### 5.1.1.3 Targeting Emotional Aspects of Reading

The audit found that schools perceive Reading to Dogs as an intervention to target the emotional aspects of reading. While presented as an educational intervention by the local authority, children's reading scores provided by schools (see section 3.2) revealed 35% of children participating in Reading to Dogs had a reading age above their chronological age at the start of the programme. Schools reported anticipating the programme would impact on children's motivation, engagement and confidence and selected children to participate in Reading to Dogs based predominantly on these emotional factors.

Interestingly, few schools tracked children's progress with regard to these aspects and relied predominantly on informal observations to monitor changes in children's confidence, engagement or motivation. One school reported using the Self-evaluation instrument for Care settings (SiCs), commonly referred to as

the Leuven scales (Laevers, et al., 2005), to assess children's wellbeing. Although an evidence based assessment tool, the SiCs provides limited information, rating children's wellbeing and involvement on a single 5 point scale based on observations.

#### 5.1.1.4 Reading Ages

School responses to the audit identified a selection of norm-referenced, standardised reading assessments, used by schools to monitor children's reading progress. Analysis of anonymised reading ages for 89 children collected by schools, found a mean increase in children's reading age of five months, following their participation in the Reading to Dogs programme. Ratio gain scores demonstrated that on average, children increased their reading age by two months for each month of participation.

As these reading age scores were obtained by schools independently of this research, it is unknown how accurately the reading assessments (on which these scores were based) were administered or scored. The accuracy of the specific anonymised scores shared with the researcher is also unclear: a single anomalous score was verified with a school and corrected from 6 years 9 months, to 9 years 1 month.

Furthermore, the duration of participation in Reading to Dogs varied substantially across the 89 children for whom data was shared, ranging from 7 weeks to 13 months. To overcome this issue, ratio gain scores were calculated for each child, whereby the difference in a child's reading age before and after the programme was divided by the duration of their participation in the programme. Using these scores, the average ratio gain was an increase of 2.34 months' reading age for each month of participation. Fifty of the 89 children obtained a positive ratio gain score, indicating for each month of

participation in the programme, their reading age increased at a rate greater than one month.

The use of reading ages to describe children's progress is also problematic. Connelly (2013) cautions against the use of age-equivalent scores, explaining several major limitations for their analytical use. These include: misleading scores which appear substantially higher or lower than a child's chronological age yet fall with the average range of performance; encouraging a narrow view of 'normal' performance i.e. chronologically expected; extrapolating scores to age-equivalents beyond the scope of the norming sample; and inferring expectations of a steady rate of progress across a child's lifespan, rather than different rates of improvement at different stages of development (Connelly, 2013).

Given schools' expectations that Reading to Dogs would benefit children's emotional and psychological wellbeing, albeit connected to reading, a reading assessment may not be the most appropriate way in which to monitor the impact of Reading to Dogs.

### **5.1.2 Phase 2: Theory of Playful Reading**

The second phase of the research aimed to generate a grounded substantive theory of the Reading to Dogs programme. A grounded theory methodology was employed, using data collected in the first phase of the research, together with anonymised child and parent responses to school surveys, individual child interviews, as well as published research and other literature.

Grounded theory findings are presented as abstracted, theoretical concepts and explanations rather than descriptions of data gathered from participants and conditions. As grounded theory is distinct from both traditional quantitative and

qualitative methods, application of the usual criteria for assessing the quality of these approaches (e.g. trustworthiness, accuracy, objectivity) to a grounded theory is inappropriate (Holton, Grounded Theory as a General Research Methodology, 2008).

Glaser and Strauss (2008) instead recommend four standards by which the quality of a grounded theory may be judged, namely: fit, work, relevance and modifiability. The quality of the substantive theory of Playful Reading is discussed in relation to these four criteria.

#### 5.1.2.1 Fit

Fit deals with the extent to which a grounded theory consists of suitable conceptual codes and categories which have emerged from the data, rather than the researcher's preconceived concepts which have been imposed on the data (Glaser, 1992).

Glaser acknowledges that researchers typically possess knowledge of a range of theoretical frameworks and other literature which could be applicable to their research (Glaser, 2014) however there is no requirement for researchers to erase all such knowledge from their consciousness. In order to allow codes and categories to genuinely emerge from the data, the researcher is required to simply set aside their existing knowledge and any preconceptions they may hold about the research area while collecting and analysing data (Elliot & Higgins, 2012). After the induction of a substantive theory the researcher may once again engage with their expertise and use this knowledge to tie their findings to extant theories.

The completion of an exhaustive literature review is discouraged in grounded theory before a substantive theory has emerged (Glaser, 2012), as deliberate

reading around a research area could bias the researcher and compromise the use of emergent codes or categories.

In the instance of this thesis, the researcher was already familiar with a range of literature and research in relation to the wider field of Animal Assisted Intervention (AAI) and some published works specifically relating to Reading to Dogs. In order to convey this and demonstrate the lack of existing theoretical explanations, an overview of existing published literature, research and unpublished theses was provided in the introduction to this thesis (see section 1.2).

A grounded theory should be developed from concepts arising in the data, initially identified through open coding and subsequently verified and refined through the process of constant comparative analysis (Glaser & Strauss, 2008).

The present research followed Glaser's classic grounded theory methodology (Glaser, 2004), beginning with open coding of data from phase one of this research and line-by-line open coding of initial interview transcripts (see Appendix 11). The process of constant comparative analysis was used to corroborate each conceptual code and category as it emerged from the data (see section 2.5.4). Once the substantive theory emerged and conceptual categories were saturated, a further comparison was made to existing literature and theoretical explanations, relevant to the theoretical concepts of playful reading.

Adhering to the methodology described in classic grounded theory ensured the induction of a substantive theory from the data. In this way, the theory of playful reading has emergent fit to the range of data collected in this research.



#### 5.1.2.2 Work

Work concerns the grounded theory's ability to explain and interpret behaviour in the relevant substantive area and predict future behaviour (Holton, Grounded Theory as a General Research Methodolgy, 2008).

Just as open coding of early data allows the researcher to remain open to emergent codes and concepts (rather than impose preconceptions) it also encourages the researcher to be sensitive to theoretical codes which may work to explain the data (Glaser, 2004). By generating a range of coding categories in open coding, the researcher is presented with multiple ways of interpreting the data.

As each category becomes saturated through subsequent coding all behaviours present in the data are accounted for within conceptual categories. Through constant comparative analysis, codes and categories are repeatedly compared and adjusted to ensure new data is progressively integrated into the emerging theoretical explanation (Glaser, 2012). Thus a grounded theory should account for all behaviours in the data and therefore work to explain these.

The theory of playful reading explains primary school children's reading behaviour as an emotional response to the challenges of reading upon entering school. This is reinforced through repeated negative reading experiences with adults, often linked to assessment. Children's attitudinal responses to Reading to Dogs, as well as the behaviour of both dogs and children during sessions, are explained in terms of the novelty and contrast of this experience, awakening a playful mentality toward reading. This also explains schools' employment of selection criteria to identify children for participation in Reading to Dogs based predominantly upon emotional needs, rather than purely difficulties with reading (see section 3.2).

Specific behaviours identified by schools in the audit as occurring in sessions are explained through subcategories in the theory. Children's tendency to stroke and pet the dog while reading is explained in terms of reciprocal soothing, helping to children to build a mental 'capital' of positive emotions i.e. happy capital.

Children directing their reading toward the dog as an audience is explained in the subcategory of genuine listening, whereby children value the attentive, non-judgemental listening skills demonstrated by the dogs. This subcategory also explains adults' adoption of a more passive role in Reading to Dogs sessions, seldom addressing specific reading skills demonstrated by children.

Child's best friend, subcategory, explains children developing meaningful connections with dogs by demonstrating children's affinity for animals and the emotional support they receive from the relationship. This subcategory also explains how children who were initially uncertain or fearful of animals also develop closeness, referring to the innate value and interest children place in animals and how, as familiarity grows, they learn more about the animal and so build a trusting relationship.

The theory of playful reading also allows predictions to be made of future behaviour, suggesting continued positive experiences of reading and an increase in reading behaviours. Children's playful attitude toward learning fosters a more solution focussed approach toward reading challenges. This is elaborated on in both the subcategories of happy capital and real reading.

Happy capital explains that children's emotional resilience is increased through the mechanisms described in Frederickson's broaden and build theory of positive emotions (Hefferon & Boniwell, 2011). Real reading meanwhile explains that, through Reading to Dogs, children acquire a growth mindset

(Dweck, 2012) which allows them to more fully engage in challenging experiences of reading, seeing these as opportunities for learning.

As a theory, playful reading has explanatory power (Glaser, 2004) for the behaviours identified in this research and children's future behaviour. In this way, playful reading works.

#### 5.1.2.3 Relevance

Relevance deals with the core category of a grounded theory and the extent to which this focus captures the main concern of the substantive area under study (Holton, Grounded Theory as a General Research Methodology, 2008).

Grounded theory methodology involves inductive processes of constant comparative analysis and theoretical sampling to ensure the conceptual categories which emerge to form the substantive theory are grounded in the data, and therefore relevant (Glaser, 1992). Theoretical sampling involves the researcher deciding which new sources of data to pursue, based on their pertinence to emerging theoretical concepts and the need to achieve theoretical saturation (Glaser, 2004).

Within grounded theory literature it is widely acknowledged that working within the confines of university requirements presents challenges to the full implementation of grounded theory methodology (Glaser, 1998). Submission of research proposals, which detail data collection procedures, participants and sources of data in advance, necessarily limit the capacity for researchers to follow the principle of theoretical sampling.

Unlike the descriptive nature of qualitative analysis, grounded theory requires the researcher to move toward theoretical abstraction of the data, involving successive memo writing and reflection (Glaser, 2012). Generation of a rich

grounded theory necessitates time and opportunity for the researcher to conceptualise explanations of what is happening in the data.

The time limited nature of university research programmes also has the potential to obstruct researchers in fully implementing the grounded theory method. As researchers are urged to complete phases of their research, and ultimately submit the write-up of research, according to predetermined university schedules, their capacity to fully explore and extend theoretical sampling of data in order to reach theoretical saturation is restricted.

Glaser does however warn researchers against the temptation to engage in endless theoretical sampling, resulting in overwhelming amounts of data (Glaser, 2012). Once conceptual categories reach theoretical saturation, researchers are advised to cease data collection, sort theoretical memos and write their theory.

Working within these parameters, the present research adhered closely to the classic grounded theory method, employing open coding and theoretical sampling to direct interview questions and source relevant published literature and existing theory in order to attain theoretical saturation (see section 2.5.4).

As Glaser writes:

*“Open coding allows the analyst to see the direction in which to take the study by theoretical sampling before he/she has become selective and focused on a particular problem. Thus, when he/she does begin to focus, he/she is sure of relevance.”*

*(Glaser, 2004, p. 13)*

The current research also integrated conceptual categories (see section 2.5.4.4) to delimit the theory and confirm the relevance of the core category (Glaser & Strauss, 2008). Through comparing codes and categories, playful reading emerged over the course of the research as the main concern and was

expanded upon through interviews with children and reviewing published literature.

Similarly, the process of memo sorting allowed the researcher to demote certain concepts from distinct conceptual categories to features of other existing categories, forming discrete subcategories of the main theory (see section 2.5.4.4). While sorting memos to form a coherent theory, sufficient similarities were seen in the behaviours explained in the category of reciprocal soothing to incorporate this into the wider subcategory of happy capital: the physiological benefits children experience as they stroke the reading dog generate further positive emotions (e.g. calmness) and add to the children's collection of happy capital to later draw upon.

The theory of playful reading is therefore relevant to concerns and issues raised in the data, as confirmed through deployment of the grounded theory method (i.e. integration of categories, delimiting the theory and memo sorting).

#### 5.1.2.4 Modifiability

Modifiability refers to the ability of a grounded theory to be adapted and revised in order to incorporate new data (Glaser, 2007).

In their original work describing grounded theory, Glaser and Strauss (2008) emphasise the importance of acknowledging a substantive theory as a process, rather than a finalised product. A grounded theory should be continuously evolving and therefore able to be modified:

*“Modifiability refers to the theory’s ability to be continually modified as new data emerge to produce new categories, properties or dimensions of the theory. This living quality of grounded theory ensures its continuing relevance and value to the social world from which it has emerged.”*

*(Holton, 2008, p. 83)*

While research in quantitative or qualitative paradigms typically discusses the reproducibility of findings, this issue is irrelevant to grounded theory as there is no 'fixed' outcome to reproduce (Glaser, 2007). A grounded theory is a fluid, evolving conceptual abstraction of data from various sources.

Techniques such as theoretical sampling, whereby the researcher deliberately pursues new data in order to achieve theoretical saturation of emerging conceptual categories, result in highly idiosyncratic compilations of data in grounded theory research. Individualising research in this way further reduces the possibility for another researcher to reproduce identical data and therefore generate the same theoretical abstractions which created the grounded theory (Glaser, 2007).

In the present research an initial audit gathered schools' responses to a structured telephone survey, with some schools supplying additional data in the form of anonymised reading scores and anonymised comments from children and parents (see section 2.4.3). Emerging concepts were then explored in individual interviews with ten children who had participated in the Reading to Dogs programme, each interview building on the conceptual categories to achieve theoretical saturation (see section 2.5.4.2).

Potential new research directions and sources of data are explored in section 5.2. The theory of playful reading is a substantive theory, limited to explaining behaviours specific to the area of Reading to Dogs, rather than a formal theory, developed to explain the broader area of AAI, or an 'all-inclusive' grand theory (Glaser & Strauss, 2008). The testing or verification of substantive theory through subsequent quantitative research is seen as unnecessary, given the rate of change in substantive areas (Glaser, 2008). This censure is particularly appropriate to the topic of AAI, an emerging area with a growing body of

research. Instead, Glaser (2008) recommends the use of further grounded theory investigation to explore the applicability of a substantive theory and expand its conceptual categories to integrate new data.

The theory of playful reading is not, however, restricted to this data and retains the capacity to be adapted in relation to new emerging data. This substantive theory can therefore be said to be modifiable.

### **5.1.3 Summary of Commentary on Findings**

Despite the limitations raised here regarding the reliability and generalisability of phase one findings, the audit provided an overview of current practice. Prior to this research, very little was known regarding the implementation and delivery of Reading to Dogs as an AAI in primary schools within the local authority. This research has significantly contributed to the knowledge base regarding current practice of the Reading to Dogs programme in the local authority.

The theory of playful reading generated in this research provides the first theoretical explanation of Reading to Dogs. While the theory of playful reading fits and works with the data particular to this research, generating relevant theoretical concepts, it has scope to be modified and integrate new conceptual ideas.

## **5.2 Implications of Research**

The present research generated an innovative theoretical explanation for the Reading to Dogs programme, in addition to providing an initial account of current practice within the local authority area. Various implications of these findings are explored in relation to both practice and the field of Animal Assisted Interventions.

While serving as an example for robust research into AAI, the present research was by no means exhaustive and a number of issues persist which could be explored through further research. Suggestions for future research directions are also discussed here.

### **5.2.1 Implications for Research Area**

#### **5.2.1.1 Reading to Dogs within the UK**

Current literature regarding the practice of Reading to Dogs is sparse and there is no clear information regarding the prevalence of this or similar schemes (e.g. therapeutic AAI programmes) in schools. The audit indicated that Reading to Dogs is a minority intervention in the local authority area, occurring in only 4% of local authority primary schools and involving nearly 600 children since its introduction in 2010.

As explained previously, the figures presenting the number of children involved in Reading to Dogs and the proportion of these classed as vulnerable, were estimates, extrapolated from school responses to questions in the audit (see section 3.2). A more detailed investigation of the numbers of children involved and their demographic characteristics would provide greater understanding regarding the scope of Reading to Dogs.



The present research was conducted in a single local authority area, involving data from nineteen schools and ten individual children. It is unknown whether the findings of this research are representative of national practice and whether such practice is comparable internationally. In addition, the lack of an identified advocate for the programme within the local authority may have impacted on the uptake of Reading to Dogs in schools. It would be interesting therefore to compare the extent of the programme in other authority areas within the UK, particularly those more actively promoting the programme.

#### 5.2.1.2 Relationships with Reading Dogs

Within the theory of playful reading, the subcategory of child's best friend deals with the close relationships children build with the dogs and how these perform a central function in Reading to Dogs. Although reference is made to the biophilia hypothesis (Melson & Fine, 2010) in the concept of animal magnets to explain children's interest in animals, children's relationships with animals in AAI has not previously been explored.

Other authors have written extensively on the human-animal bond (e.g. Fine, 2010; McCardle, McCune, Griffin, & Maholmes, 2011) and proposed extending attachment theory to include humans' relationships with animals. These writings have however focussed almost exclusively on relationships with companion animals rather than animals involved in AAI.

Children in the present research described their relationships with the reading dogs in terms of friendship and playmates. This appears to be a different dynamic than the hierarchical relationship between pet and owner, with a more equal balance of power. The relationships between children and the animals involved in AAI clearly warrants further investigation.

#### 5.2.1.4 Animals in AAI

Previous research in AAI has suggested the mere presence of an animal is in itself beneficial (e.g. Limond, 1998). This research highlighted specific behaviours demonstrated by the reading dogs which the children perceived as helpful. The subcategory of genuine listening details particular listening behaviours which benefited the children's reading. The children attributed the animals' ability to display these behaviours to the dogs' training as qualified reading dogs. While some research has investigated eye contact and shared gaze between humans and dogs (Elgier, Jakovcevic, Barrera, Mustaca, & Bentosela, 2008), no research has yet explored animal behaviours which indicate listening to humans.

This research dealt solely with dogs. In the subcategory genuine listening, specific reference is made to the concept that dogs, as a species, are well suited to the role of reading dog. AAI typically involve domesticated animals, most notably dogs and horses, due to financial, safety and logistical concerns (Serpell, Coppinger, Fine, & Peralta, 2010).

Schools in the audit did however make reference to other animals, with one school reportedly using reading rabbits and another using a range of reptiles in addition to the reading dog. While a few children mentioned reading to their pets, with mixed success, one child specifically mentioned reading to chickens (*Adam, lines 368-378*). Although not pursued in the present research, there is clearly scope to explore the use of other animals in reading. A grounded theory study of different animals used in reading could generate additional data to extend and modify the theory of playful reading.

## **5.2.2 Implications for Practice**

### **5.2.2.1 Formalising Reading**

Both national (Clark, 2014) and international (Twist, Sizmur, Bartlett, & Lynn, 2012) surveys of reading have found correlations between children's enjoyment of reading and their reading attainment. Playful reading emphasises children's need for fun and enjoyment while learning to read. This feature of Reading to Dogs was highly valued by children and was central to facilitating children in engaging with reading and in moving toward success.

The significance of emotional aspects of reading was first highlighted in the 1970's by Educational Psychologist Denis Lawrence. Lawrence combined self-esteem and reading interventions to support children in developing their reading ability (Lawrence, 1988). Although research into this combined approach toward reading interventions lapsed (Brooks, 2007), playful reading suggests that targeting children's feelings about reading is worthwhile.

In the present research, children's dislike for and disengagement from reading was connected to their increasingly formalised experiences of reading in school. This has implications for both targeted reading interventions and the wider teaching of reading in schools. Playful reading indicates that young children would benefit from a more graduated transition from the play-oriented experiences of reading in Early Years settings, into the more formal classroom environment of mainstream school.

This need for fun and a sense of playfulness persists as children progress through primary school. This is an important message in the current climate of accountability, where schools are required to demonstrate, through assessment, children's increasing attainment and progress.

Furthermore, schools' enthusiasm for the Reading to Dogs programme, demonstrated in their desire to participate in this research and a multitude of informal comments made during audit telephone interviews, suggests they also enjoy the programme. School staff were keen to share their passion for and belief in the programme, expressing excitement at such a novel approach. In addition, both in schools which participated in the research but were unable to continue the programme and in schools contacted prior to the research which had not yet been able to run the programme (see section 2.4.2), staff were eager to offer Reading to Dogs in their school. This level of enthusiasm suggests Reading to Dogs may have a similar rejuvenating effect for the adults involved, and presents an opportunity for further investigation.

#### 5.2.2.2 Educational Psychologists' Practice

The researcher became aware of AAI in a chance viewing of a televised news bulletin which referenced Reading to Dogs. Informal conversations with other Educational Psychologists (EPs) revealed that most were unaware of Reading to Dogs and only a minority had heard of AAI. This lack of awareness is understandable given the small number of schools currently providing the programme within the local authority, and AAI's status as an emerging area.

AAI programmes are nonetheless happening in schools, often involving vulnerable children (see section 3.2). Indeed, informal conversations about this research between the researcher and schools with whom the researcher has a professional relationship, led to the discovery that several schools are running therapeutic AAI visitation programmes, unknown to their EP. As programmes like Reading to Dogs become more widespread there is an increasing need for EPs to become aware of AAI as a field, and common interventions.

The professional training of EPs provides them with skills to critically interpret research and present this in a meaningful way to other professionals (Fox, 2003). These are especially pertinent to the field of AAI, where the evidence base is currently limited and anecdotal reports are frequently inaccurately cited as evidence (see section 1.2.6). While the involvement of EPs in the delivery of AAI is arguably unnecessary, and potentially an inappropriate application of such highly skilled practitioners (Pugh, 2010), there is clearly a role for EPs to support schools in making informed decisions about programmes like Reading to Dogs. In order to do this, however, EPs need to develop their knowledge regarding AAI and the theoretical basis, or lack thereof, for programmes.

Doctoral training programmes also give EPs specific skills in research design. Given their close professional relationships with schools, EPs are well placed to assist schools in setting up and monitoring Reading to Dogs or other AAI programmes. EPs' awareness of the key elements that facilitate success, as explained in playful reading, can be shared with schools to ensure that their delivery of the programme retains these components.

This research also revealed the majority of schools were using measures of children's reading ages to track their progress. As already discussed (see section 5.1.1.4), reading age is not necessarily a good representation of reading ability and one implication of playful reading is that it may be more appropriate to monitor the impact of Reading to Dogs on children's emotional wellbeing. As professional psychologists, helping schools to understand and monitor children's wellbeing is an obvious area for EP contribution.

### **5.2.3 Dissemination of Research Findings**

The assertion that the present research provides not only a uniquely robust examination of Reading to Dogs but also the first theoretical explanation, grounded in data, of an AAI programme, implies that the findings of this research are of significance. A variety of implications for researchers and authors in the field of AAI, together with implications for schools and Educational Psychologists have also been presented (see section 5.2). It is therefore important that these findings be disseminated in order to ensure the impact of this research.

Guidance from the Economic and Social Research Council states that, in order to plan for effective impact, researchers need to identify three things: the key stakeholders, how they will benefit, and what action the researcher will take to provide stakeholders with the opportunity to benefit (Research Councils UK, 2014). Key stakeholders in the present research consist of the research participants and those for whom this research has particular implications.

#### **5.2.3.1 Research Participants**

A total of nineteen schools and ten individual children actively participated in this research. As previously discussed, the theory of playful reading identifies important aspects of Reading to Dogs which facilitated children in making progress with their reading (see section 5.1.1.3). Sharing this information with schools and encouraging them to consider how they track and monitor the programme is likely to be beneficial.

Individual schools who participated in this research will therefore be contacted, initially thank them for their participation and also to pass on the researcher's thanks to the children who participated in individual interviews.

An executive summary of the key research findings, written in accessible language, will also be shared with the schools and children who participated in the research.

#### 5.2.3.2 Educational Psychologists

Educational Psychologists (EPs) represent another key stakeholder group for this research. As outlined in the previous section, EPs would benefit from the increased awareness and understanding of AAI that this research provides, together with the specific elements of Reading to Dogs which support children.

The findings of this research will be presented to the Educational Psychology Service (EPS) in the local authority in which this research was carried out, at an annual research conference hosted by the EPS. EPs from other authority areas and Trainee EPs from local institutions offering the doctoral training programme are also invited to attend the conference.

#### 5.2.3.3 Authors, Researchers and Others Interested in AAI

Existing literature on AAI comes from a range of professional researchers and enthusiastic laypeople. Both groups would benefit from the demonstration of a robust methodological approach to researching AAI and from the presentation of the theory of playful reading as an initial theoretical explanation of Reading to Dogs.

Peterson and Park (2010) argue that presenting the key findings of research in a sufficiently simple manner as to be accessible, while retaining the elements which make such findings interesting, leads to a lasting impact. Meanwhile, Anderman (2011) laments that research findings, particularly within Educational Psychology, are rarely shared with the general public and implores EPs to take a more active role in the promotion of their research.

With this in mind, publication of the aforementioned executive summary of the research findings in an academic journal will be considered. In addition, the researcher will pursue a suitable forum in which to share these findings with non-academic AAI enthusiasts, for example through charities specialising in AAI.



## 5.3 Reflections on Research

### 5.3.1 Researcher Position & Power

In any given research project, the researcher is necessarily in a more powerful position than participants due to their role as research designer, controlling procedures and lines of enquiry. This privilege is accentuated when the research involves participants who are vulnerable or otherwise lacking in influence, such as children.

In the present research, attempts were made to address this imbalance through the researcher's adoption of a relaxed approach whilst interviewing children, using informal language and responding naturally to their statements. For example, indicating disgust at Ben's description of slow worms wriggling off after being partially eaten (*Ben, lines 73-75*), and giggling with Fiona at her comment that hamsters are 'all fidgety' (*Fiona, lines 188-191*).

Such a level of candour in the researcher's interaction with participants might be deemed by constructionists as directing children's comments, or perceived by positivists as compromising the integrity of the research. In this instance the researcher felt a more authentic response was appropriate, showing greater respect for the children's openness and willingness to share their views.

The language used by the researcher and relaxed atmosphere created during individual interviews appeared to support children in feeling able to share their thoughts and ideas honestly. Eric's early termination of the interview suggests he clearly understood his right to withdraw and felt sufficiently empowered to do so. Adam meanwhile ended his interview with an unprompted, explicit affirmation that he consented to his interview being used in the research (*Adam, lines 417-421*).

Efforts were also made by the researcher to empower the schools which participated in structured telephone interviews during phase one of this research, sending a list of questions in advance to demystify the interview and encouraging an informal atmosphere during telephone interviews to put school staff at their ease. Of the twenty-six schools initially contacted about this research (see section 2.4.2) and the subsequently identified as having run the Reading to Dogs programme, all happily consented to participate in the research.

The audit asked questions about school practice regarding Reading to Dogs and inquired about the extent to which the programme was monitored by schools. Such questions had the potential to be seen as threatening, implying judgements of school practice. Nonetheless, all schools responded openly to the audit and were invariably enthusiastic about the programme, unreservedly extolling the benefits of Reading to Dogs.

Despite repeated assertions that the researcher had no influence over either local authority support for, or opposition against, the Reading to Dogs programme, it may have been perceived by schools that it was in their interest to present the programme in a positive light. The researcher's assurances of school's anonymity may not have been fully believed, or the researcher's role as a Trainee EP within the local authority may have resulted in the perception of the researcher as occupying the role of critical friend, or even inspector.

The substantial reduction in the level of responses from initial telephone interviews to sharing of tracking data suggests either this was an onerous task or that schools were less comfortable divulging this information. Fourteen schools initially agreed to share anonymised reading age scores for children who had participated in Reading to Dogs in their programme however data was

ultimately received by only three schools, with additional anonymised responses to qualitative surveys shared by a further three schools. While the schools provided consent to share this data at the end of the telephone interview, it may have been difficult to refuse such a direct request, resulting in the later withdrawals.

Revealing children's reading age scores, albeit with names and schools anonymised, involves a greater degree of vulnerability on the part of schools than the generalised comments, shared during the audit, regarding their experiences of and satisfaction with Reading to Dogs.

In addition, the researcher's increasingly detailed inquiries may have been unwelcomed by schools. The lack of involvement from the local authority in the Reading to Dogs programme affords schools a significant degree of freedom in their practice. Given that the playful aspect of this intervention was so valued by children, and seemingly by school staff as well (see section 5.2.2.1), the researcher's external involvement and scrutiny of the programme could be seen as detracting from the playfulness of Reading to Dogs. Further, the intrusion of a researcher, employed by the local authority, could be seen as threatening the introduction of regulation and formalisation of the programme.

### **5.3.2 Challenges of Research**

As previously indicated, selection of a grounded theory methodology in a doctoral thesis presents a number of challenges (see section 5.1.2.3). In this project, while obtaining approval from university boards (e.g. research registration committee) the researcher experienced repeated requests for more specific proposals, detailing research procedures and providing further justification from the literature for the selection of grounded theory. Glaser argues that a lack of understanding of grounded theory, both on the part of the

researcher and academic research committees, frequently results in such attempts to inappropriately impose the values of other qualitative methods onto grounded theory research (Glaser, 2008).

As a novice researcher, the adoption of grounded theory in this research was initially liberating, offering scope to pursue emerging concepts and the prospect of a meaningful outcome to the research, i.e. a substantive theory. Once the research commenced however this was replaced by uncertainty and lack of confidence when attempting techniques such as freestyle memo writing.

These reservations were encapsulated in the researcher's deliberation over whether to transcribe interviews in full or rely solely upon field notes. While field notes are argued to better capture conceptual ideas from interviews (Holton, 2008), the prospect of conducting lengthy and detailed interviews with children as a novice researcher whilst also taking thorough notes was too daunting.

The researcher also anticipated that children would be distracted by note taking, as proven during an interview with Gloria (*lines 269-271*). In addition, the act of note taking could be seen by children as validating or judging certain responses, which is essentially what the researcher is doing. The decision was ultimately made to record interviews and use a combination of transcripts and field notes for analysis (see section 2.5.3).

Reading around the subject of classic grounded theory provided reassurance, through other novice researchers' anecdotal reports of difficulties implementing grounded theory (e.g. Elliot & Higgins, 2012). Much of the literature openly acknowledges the paradox of simple freedoms and complex constraints provided by grounded theory, and Glaser himself states:

*"Doing CGT (classic grounded theory) is not easy as a step-by-step methodology. All goes on at once, often initially in confusion"*

*(Glaser, 2014, p. 12)*

Another challenge the researcher faced in this project was balancing the desire to maintain a professional distance from the research with the need to be reflexive and acknowledge the impact of the individual researcher on research. Academic tradition favours writing in the passive voice and, being accustomed to this style through both academic and professional writing, the researcher felt considerable discomfort writing parts of this thesis in the first person, for example when required to justify the research in personal terms (see section 1.4.2).

Researchers are actively encouraged to use their own personal style and format whilst constructing memos in grounded theory, recording whatever thoughts and reflections occur as these contribute to the generation of theoretical concepts (Glaser, 2013). This personalised element of theoretical memo writing also initially created feelings of uneasiness in the researcher as it was anticipated that these memos would need to be shared and discussed with others. Such practice is discouraged by Glaser, however: as memos are intended as ongoing notes of thoughts and ideas, rather than proof of finalised theory, having memos read or reviewed can deter the researcher from capturing tenuous ideas or lead to feelings of certainty about concepts that are, as yet, unverified.

## **5.4 Conclusions**

Research and practice in Animal Assisted Interventions is an emerging area with limited published works. Despite the tenuous evidence base and lack of theoretical underpinnings for AAI, schools are enthusiastically adopting programmes, such as Reading to Dogs, as creative solutions to supporting children's reading development.

A structured telephone audit within the local authority identified 4% of primary schools as having delivered the programme, with a significant positive impact on children's reading age scores and observed benefits to their emotional attitudes toward reading.

A grounded theory investigation of Reading to Dogs generated the first theoretical explanation in this substantive area. Playful reading explains how Reading to Dogs supports children to develop a more playful and positive attitude toward reading by building a close relationship with the reading dog and receiving non-judgemental and focussed attention as they read. These experiences develop a mental capital of positive emotions which enhances children's resiliency for future reading experiences. Furthermore, a growth mindset toward reading ability is fostered through children recognising demonstrable improvements in their ability to use reading skills.

The current research provides a starting point for other researchers in the field of AAI in the presentation of playful reading, a theoretical framework which explains Reading to Dogs. There are a range of opportunities for further research to both expand on issues raised in the audit and to extend the substantive grounded theory presented here.

Overall, Educational Psychologists' awareness of AAI programmes like Reading to Dogs is extremely limited and needs to be addressed. Schools interested in AAI programmes would benefit from EPs' specialised skills in interpreting research and understanding key components, such as those identified in playful reading, which facilitate successful outcomes.

EPs should take care not to dismiss AAI as eccentric practice and outside their remit: In the course of conducting this research, a growing number of news articles were shared with the researcher by friends and colleagues, previously unaware of AAI prior to conversations about the research. A majority of these articles focussed on the use of AAI to assist children with autism spectrum disorder, with claims that animals' honest feedback and calming influence supported the children to develop their interpersonal skills.

This is one of many examples which demonstrates the expanding nature of AAI in areas pertinent to Educational Psychologists' practice. As Serpell concludes:

*"If interactions with animals are as attractive and important to children as they appear to be, then it is the height of adult arrogance to assume that child-animal relations are somehow irrelevant."*

*(Serpell, 2010, p. 92)*

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## Appendices

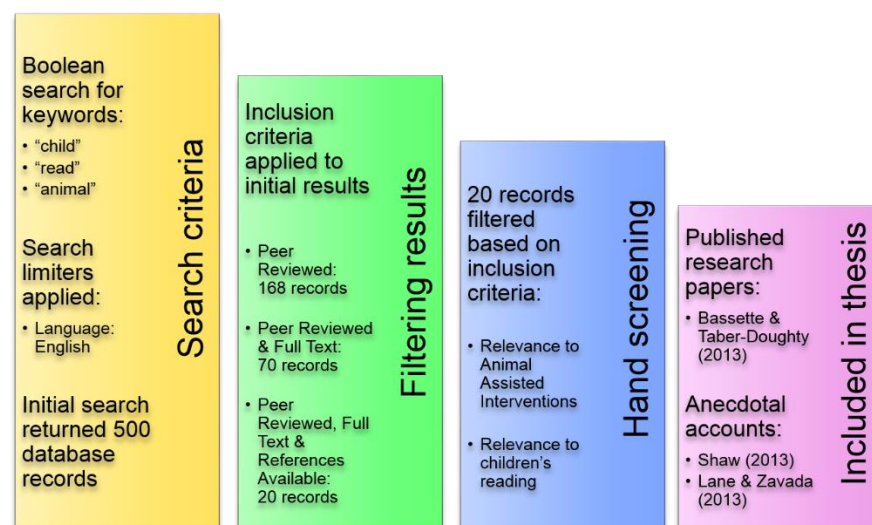
### Appendix 1: Search criteria used in structured literature review

An online literature search for English language, peer-reviewed published articles was performed in January 2014 using six databases: Academic Search Complete, Child & Adolescent Studies, Education Research Complete, ERIC, PsycINFO, PsycARTICLES.

A Boolean search was conducted using the terms “child”, “read” and “animal”. 500 database records were returned following the initial search. These results were filtered using inclusion criteria of: peer reviewed (academic) journal, full text available and references available.

20 database records remained. These articles were hand screened to identify articles relevant to the current research, relating to Animal Assisted Interventions and children’s reading.

A single published research paper was identified (Bassette & Taber-Doughty, 2013), in addition to two anecdotal accounts (Shaw, 2013; Lane & Zavada, 2013).



## **Appendix 2: Email inviting schools to participate**

**From:** Davison, Hazel  
**Sent:** 23 April 2014 14:50  
**To:** xxx  
**Subject:** Reading to Dogs

Dear xxx,

My name is Hazel Davison and I am a Year 3 Trainee Educational Psychologist at the University of East London, currently on placement in Xxx Educational Psychology Service, working in Xxx.

I am doing a doctoral thesis research project with schools who are currently, or have previously run the Reading to Dogs scheme in their school. I have now established ethical approval from my University and can proceed with the research.

I previously contacted you with regard to participation in this research. If you are still interested, I would like to talk to you by telephone regarding this scheme. I have attached a research information sheet that explains my research project, as well as a copy of the telephone questions I would like to ask you.

Could you please:

- a) read the information sheet which explains the research project and your involvement
- b) read through the questions in the structured telephone audit – you may need to find out some information from others in order to answer these questions

I will contact you in the next two weeks to confirm whether you would like to participate in my research. I am happy to speak to you to explain my research further and answer any questions you may have.

If you are still happy to participate, I will arrange a mutually convenient time to complete the telephone interview. I anticipate this would take approximately 30 minutes.

Many thanks,

Hazel Davison

**Hazel Davison** | Trainee Educational Psychologist | Educational Psychology, XXX,  
XXX, XXX XXXX XXX | Tel: XXX

### **Appendix 3: Research Information Sheet**

Hello! My name is Hazel Davison.

I work in Xxx Educational Psychology Service and I'm in the final year of my training to become an Educational Psychologist.

#### **My Project**

I'm doing a thesis research project with schools and children who have been involved in the Reading to Dogs programme. There are two parts to my research:

#### **Phase 1: A telephone interview with schools**

I am hoping to establish what the current practice with regard to the Reading to Dogs programme is. To do this I will be talking to schools who are currently, or have previously, run the Reading to Dogs programme in their school and asking them a variety of questions.

A copy of the interview schedule is included with this information sheet.

#### **Phase 2: Individual interviews with children**

I also intend to interview children who have participated in the Reading to Dogs programme and whom schools believe benefited from this.

I will be asking schools if they think any of their pupils would like to talk to me about their experiences of the Reading to Dogs programme. There is an information and consent sheet for children who would like to participate in my research.

#### **What would you have to do?**

I will be contacting your school in the next two weeks to confirm whether you would like to participate in my research. I am happy to speak to you to explain my research further and answer any questions you may have. If you are still happy to participate, I will arrange a mutually convenient time to complete the telephone interview.

Schools who agree to a telephone interview are giving consent to participate in my research so there is no need to sign a consent form.

Please read through the questions in the interview schedule before the interview. There are some that you may need to find out the answers to before the interview (e.g. how many children have participated in the Reading to Dogs programme?). Please make sure you have all of the necessary information ready for the telephone interview.

You will need to spend up to 30 minutes on a telephone interview, answering the attached questions about their school's use of the Reading to Dogs programme.

I will read out the questions from the attached interview schedule and ask which responses are appropriate to your school. I won't use anyone's name or the name of the school and all responses will remain confidential.

What happens to the information you give me?

I will interview lots of schools and ask them the same questions. When I have finished all of the interviews, I'll write about what I've found out. Everything you say in the interview will be kept private and confidential.

After I've finished writing about my project, I'll send you a letter saying what I found out. I'm also happy to arrange to come and see you to talk about what I found out.

If you change your mind after the interview, please contact me as quickly as possible. As long as I haven't finished writing my project, I can take out anything that you've said.

If you want to know a bit more, or if you have some questions for me, please ask! You can email me at [hazel.davison@xxx.gov.uk](mailto:hazel.davison@xxx.gov.uk), or you can call me on xxx.



## **Appendix 4: Structured interview schedule**

### Structured telephone audit

Why did you decide to run the Reading to Dogs programme in your school?

- ☐ New and novel approach
- ☐ Recommended by another school
- ☐ Saw a library demonstration
- ☐ Persuaded by an article or news item mentioning Reading to Dogs
- ☐ Positive experiences of other Animal Assisted Interventions
- ☐ Other \_\_\_\_\_

What positive impact did you anticipate the Reading to Dogs programme would have?

- ☐ Reading age
- ☐ Reading (comprehension)
- ☐ Writing ability
- ☐ Motivation
- ☐ Engagement
- ☐ Confidence
- ☐ Self-concept
- ☐ Other \_\_\_\_\_

Are you still running the Reading to Dogs programme in your school?

- ☐ Yes
- ☐ No

If no, why did you stop running the Reading to Dogs programme in your school?

- ☐ n/a still running Reading to Dogs programme
- ☐ Dog no longer available
- ☐ Adult / dog handler no longer available
- ☐ Other logistical reason (e.g. time, space)
- ☐ No discernable impact
- ☐ Children disliked programme
- ☐ Complaints
- ☐ Other \_\_\_\_\_

What measures are administered to track children's progress through their participation in the programme?

- ☐ Reading age \_\_\_\_\_
- ☐ Reading comprehension \_\_\_\_\_
- ☐ Writing ability \_\_\_\_\_
- ☐ Motivation \_\_\_\_\_
- ☐ Engagement \_\_\_\_\_
- ☐ Confidence \_\_\_\_\_
- ☐ Self-concept \_\_\_\_\_
- ☐ Other \_\_\_\_\_

How long have you been running / did you run the Reading to Dogs programme in your school?

- ☐ Less than 2 school terms (ie 12 weeks)
- ☐ 2 – 4 school terms
- ☐ 4 – 6 school terms
- ☐ 1 – 2 school years
- ☐ More than 2 school years

How many children have participated in the programme?

- ☐ Fewer than 10 children
- ☐ 10 – 25 children
- ☐ 25 – 50 children
- ☐ 50 – 75 children
- ☐ 75 – 100 children
- ☐ 100 – 150 children
- ☐ Greater than 150 children

On what criteria are children selected for participation in the programme?

- ☐ Chronological age (ie Class grouping or Key Stage)
- ☐ Reading age
- ☐ Comprehension ability
- ☐ Writing score
- ☐ Motivation / Engagement
- ☐ Confidence
- ☐ Self-concept
- ☐ Vulnerability (e.g. LAC, free school meals)
- ☐ Special Educational Needs
- ☐ Availability during session times
- ☐ Children volunteer / express interest in participating
- ☐ Other \_\_\_\_\_

Of the children who participated in the programme, what percentage were vulnerable children (e.g. Looked After Children, at risk of exclusion, free school meals, low academic progress)?

- ☐ Fewer than 10% of participating children
- ☐ 10% - 25% participating children
- ☐ 25% - 50% participating children
- ☐ 50% - 75% participating children
- ☐ 75% - 100% participating children
- ☐ All participating children

Who oversees the programme?

- ☐ Headteacher
- ☐ Special Educational Needs Co-ordinator (SENCo)
- ☐ Literacy co-ordinator
- ☐ Other teaching staff      state role: \_\_\_\_\_
- ☐ Other non-teaching staff      state role: \_\_\_\_\_
- ☐ Other      state role: \_\_\_\_\_

Who delivers the sessions?

- ☐ Teaching staff
- ☐ Non-teaching staff
- ☐ Volunteer
- ☐ Dog owner
- ☐ Other pupils
- ☐ n/a No-one present
- ☐ Other \_\_\_\_\_

How long do children participate in the programme?

- ☐ Single one-off session
- ☐ 1 week
- ☐ 1 month
- ☐ 1 school term (ie 6 weeks)
- ☐ 2 school terms (ie 12 weeks)
- ☐ Until they achieve a target      e.g. \_\_\_\_\_
- ☐ Other \_\_\_\_\_

How often do the children participate?

- ☐ Sporadically
- ☐ Monthly
- ☐ Fortnightly
- ☐ Weekly
- ☐ Several times a week
- ☐ Daily
- ☐ Several times a day
- ☐ n/a (i.e. single one-off session)

How long does an individual session last?

- ☐ Less than 5 minutes
- ☐ 5 – 10 minutes
- ☐ 10 – 15 minutes
- ☐ 15 – 20 minutes
- ☐ 20 – 25 minutes
- ☐ 25 – 30 minutes
- ☐ Longer than 30 minutes

Which of the following features in a typical session?

- |   |                          |
|---|--------------------------|
| <input type="checkbox"/> Child petting dog                                      | <input type="checkbox"/> |
| <input type="checkbox"/> Child talking to dog                                   | <input type="checkbox"/> |
| <input type="checkbox"/> Child playing with dog                                 | <input type="checkbox"/> |
| <input type="checkbox"/> Child reading to dog                                   | <input type="checkbox"/> |
| <input type="checkbox"/> Child explaining to dog what has been read             | <input type="checkbox"/> |
| <input type="checkbox"/> Child talking to adult                                 | <input type="checkbox"/> |
| <input type="checkbox"/> Child reading to adult                                 | <input type="checkbox"/> |
| <input type="checkbox"/> Adult talking to child                                 | <input type="checkbox"/> |
| <input type="checkbox"/> Adult directly questioning child (ie Tell me..)        | <input type="checkbox"/> |
| <input type="checkbox"/> Adult indirectly questioning child (ie Tell the dog..) | <input type="checkbox"/> |
| <input type="checkbox"/> Adult reading to child                                 | <input type="checkbox"/> |
| <input type="checkbox"/> Adult silent   | <input type="checkbox"/> |
| <input type="checkbox"/> Other _____  | <input type="checkbox"/> |
| <input type="checkbox"/> Other _____  | <input type="checkbox"/> |
| <input type="checkbox"/> Other _____  | <input type="checkbox"/> |
| <input type="checkbox"/> Other _____  | <input type="checkbox"/> |

Indicate whether each feature would typically occur at the start (S), middle (M), end (E) or throughout (T) a session.

## **Appendix 5: Email requesting tracking data**

**From:** Davison, Hazel  
**Sent:** 10 June 2014 17:30  
**To:** xxx  
**Subject:** Reading to Dogs - data

Dear xxx,

### **Thank you!!**

I appreciate that schools are busy places and your time is valuable. Thank you for contributing to the first phase of my research by taking part in a telephone interview about the Reading to Dogs programme in your school.

Following our telephone interview I would like to ask for some further information that directly relates to what we talked about.

### **The data**

I would like to collect anonymised data relating to children's progress in the Reading to Dogs programme.

You mentioned that your school has tracked children's progress in relation to their participation in the programme. I would find an anonymised copy of this data extremely helpful.

You may have an existing spreadsheet or table with this data that you could remove children's names from and share with me. Alternatively, if you are collecting this data afresh, an example format that you may find helpful is attached.

Please make it clear when this data was collected i.e. as a baseline before the programme, an intermediate point during the programme, as a post-measure at the end of the programme, or a follow up measure after the programme had finished.

If you are able to include anonymised data for children in the same class or year group who did not participate in the Reading to Dogs programme, this would be especially helpful as this will allow me to compare the data to a 'control group'.

If you created a questionnaire or other measure to give to children / parents / class teachers about the Reading to Dogs programme I would really like to see a blank copy! If it is possible to access some anonymous data from these that would also be very helpful.

### **How the data will be used:**

This data would remain completely anonymous and be untraceable back to individual schools or children. I will not use names of individuals or schools, and all responses will remain confidential.

I will analyse the data for patterns and write about my findings. Once the project is complete, I will write to you about the results. I would be pleased to come and see you to discuss my results.

If you change your mind after giving me the data, please contact me as quickly as possible. As long as I have not finished writing my project, I can exclude any data that your school has shared.

**What next?**

I will contact you within the next two weeks to confirm you are able to share this data with me and the best way of doing so.

If you would like any more information about the research, or have any questions or concerns, please contact me. You can email me at [hazel.davison@xxx.gov.uk](mailto:hazel.davison@xxx.gov.uk), or you can call me on xxx (or my work mobile xxx).

Many thanks,

Hazel

**Hazel Davison** | Trainee Educational Psychologist | Educational Psychology,  
XXX, XXX, XXX XXXX XXX | Tel: XXX

## Appendix 6: Example spreadsheet for school tracking data

Example spreadsheet proforma shared with schools to complete with their own tracking data and provide to the researcher. Schools were encouraged to anonymise existing tables or spreadsheets containing tracking data. This example spreadsheet was to support schools collecting the data afresh.

	Other Assessment?				e.g. Reading Assessment (using National Curriculum levels)				Chronological age	Participated in programme?
	Baseline (?? months before)	Intermediate (?? weeks in)	Post-measure (immediately after)	Follow up (after ?? months)	Baseline (?? months before)	Intermediate (?? weeks in)	Post-measure (immediately after)	Follow up (after ?? months)		
Child 1										
Child 2										
Child 3										
Child 4										
Child 5										
Child 6										
Child 7										
Child 8										
Child 9										
Child 10										

## **Appendix 7: Email requesting interview participants**

**From:** Davison, Hazel

**Sent:** 16 June 2014 09:57

**To:** xxx

**Subject:** Reading to Dogs - interviews with children

Dear xxx,

Thank you for contributing to the first phase of my research by completing a telephone interview about the Reading to Dogs programme in your school. I may also have contacted you to request some anonymous data.

I am now moving into the second phase of my research which involves individual interviews with children who have participated in the Reading to Dogs programme.

I would like to speak to children whom schools believe have benefited from this experience. Could you please identify two children within your school that you think would like to talk to me about their experiences of the Reading to Dogs programme?

I have attached an information sheet and consent form for children who would like to participate in my research. Please share these with the children (and their parents) who you think may be interested in speaking with me. Once children and parents have given their consent I will arrange to meet them at school and explain my project to them. If they are still happy to talk to me, I will ask them some questions about Reading to Dogs.

As a Trainee Educational Psychologist I work with a range of children with a number of needs on a regular basis. A significant amount of my training relates to putting children at their ease and building rapport to support them in relaxing and opening up. I am more than happy to arrange to come into the school in person and meet the children with you beforehand to introduce myself and reassure the children (and parents!). This could even be arranged so that parents are able to attend and ask any questions they might have.

The interviews will be recorded using a digital recorder and transcribed afterwards. This data would be remain completely anonymous and be untraceable back to individual schools or children. All responses will remain confidential.

If you would like any more information about the research, or have any questions or concerns, please contact me. You can email me at [hazel.davison@xxx.gov.uk](mailto:hazel.davison@xxx.gov.uk), or you can call me on xxx.

Many thanks,

Hazel

**Hazel Davison** | Trainee Educational Psychologist | Educational Psychology,  
XXX, XXX, XXX XXXX XXX | Tel: XXX



## Appendix 8: Participant invitation letter

This is me...



Hello! My name's Hazel.

I work in xxx and I'm training to be an Educational Psychologist (someone who works with schools and young people and is interested in how we think and learn). I'm doing a research project with children who have been part of the Reading to Dogs programme.

### My Project

I'd like to know more about what you think about Reading to Dogs. I'd like to ask you if you think it helped your reading and why. I'd also like to know if you think Reading to Dogs helped with anything else and why.

### What would you have to do?

If you would like to be part of my project, both you and your parent (or legal guardian) need to sign a form that says you agree to talk to me about Reading to Dogs.

I'll meet with you at your school and explain my project and you can ask me any questions you might have. If you are still happy to talk to me, I'll ask you to talk about Reading to Dogs.

I'll record the conversation with a digital recorder and write it all down afterwards. I won't use anyone's name and I won't tell anyone what you said.

I'll also talk to other children and ask them the same questions as you, as well as some new questions. I might ask to talk to you again and ask you some new questions.

### What happens then?

When I've finished talking to all the children, I'll write about what I've found out. I won't use your name and I'll make sure that no one can tell what you said.

Everything you say in the interview will be kept private. The only time I might have to tell anyone else is if I was worried that you or someone else wasn't safe.

After I've finished writing about my project, I'll send you a letter saying what I found out. I'm also happy to arrange to come and see you to talk about what I found out.

### What if I change my mind?

That's alright! If you change your mind before you talk to me, just tell your parent and ask them to let your school know. If you change your mind after we've talked, ask your parent to let the school know. As long as I haven't finished writing my project, I can take out anything that you've said.

### What to do...



Don't want to talk to me about Reading to Dogs? That's ok, you don't have to! If you don't want to be part of the research you don't need to do anything else.



Still not sure? If you want to know a bit more, or if you have some questions for me, please ask! You can email me at [hazel.davison@xxx.gov.uk](mailto:hazel.davison@xxx.gov.uk), or you can call me on xxx.



Want to be part of my research? That's great! You need to tell your parent **now** and then you and a parent (or guardian) also need to sign the consent forms.

## **Appendix 9: Consent form**

If you want to be part of my research, it's important that you fill in this form. It needs to be signed by you and by a parent (or guardian).

### **The Child should fill in this section**

Please ✓ one box for each question.

	Yes	No
I have read the information sheet and I understand what the research project is about.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that I can change my mind and stop being part of the research project if I want to.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that I don't have to take part in an interview if I don't want to.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that I don't have to answer any questions that I don't want to.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that my answers will be recorded on a digital tape recorder.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that all the information I give will be kept safely and not shared with anyone until my name (and any other way of identifying me) has been taken off. Hazel can only tell someone my name if something I say makes her worried that I, or someone else, isn't safe.	<input type="checkbox"/>	<input type="checkbox"/>

Signed \_\_\_\_\_

### **The Parent or Guardian should fill in this section**

Please ✓ one box for each question.

	Yes	No
I have read the information sheet and I understand what the research project is about.	<input type="checkbox"/>	<input type="checkbox"/>
I give consent to my child being part of this research.	<input type="checkbox"/>	<input type="checkbox"/>

Signed \_\_\_\_\_

## **Appendix 10: Example interview transcript – Adam**

Researcher: Can you tell me a bit about reading with \*dog\*? 1

Adam: Erm... It's... It kinda feels kind of calm cos when I read to some... 2  
somebody like my teacher, or like somebody yeah, they're kind of saying 3  
like "oh no, that's the wrong word" and I'd say "well, I kind of tried" but 4  
with a dog it kind of, it's kind of silence and like they kind of relax and 5  
then I kind of feel happy for what I'm doing for the dog. And normally 6  
Mrs Xxx says "do you think you could do this?" or like "do you want me 7  
to help you out?" and normally I say ok, and sometimes he lays on me 8  
and I kind of feel relaxed cos normally um, if it was a person, it kind of 9  
had a go at me, yeah? And erm. It's quite fun to read to a dog like \*dog\*. 10  
And I always like to give him his biscuits and feed him and read to him. 11  
Cos I find it really fun. And sometimes I er... what was it I do... Er, my 12  
friend called Xxx, he reads to him. And I normally say to Mrs Xxx, does 13  
\*dog\* like these things, or like, does \*dog\*, like, how does \*dog\* find it 14  
like nice and then I kind of feel pleased with myself that I'm... basically 15  
I'm giving him a rest and I sometimes I kind of like it, cos like, all dogs 16  
has to have a little rest. And erm, I... normally um... feed him food and 17  
then I kind of feel like he's a really nice dog at the dog I always wanted 18  
to read to. And Mrs Xxx's got a dog called \*dog\* but I don't think I'm 19  
allowed to read to him. Instead I get to read to \*dog\* which is fantastic 20  
'cos his owner's really nice to me. And I normally say to my Mum and 21  
Dad like, I read really good and like, his owner and Mrs Xxx and him, he 22  
kind of barks at me and then his owner says he's pleased with me for 23  
like reading very well. And he normally goes to sleep and then she tells 24  
me that my reading's beautiful, so I kind of feel really, really happy. It's 25  
like the time of my life reading to \*dog\*. 26

Researcher: Wow! 27

Adam: Mmm. And I really like him and... he's... nice. He's... I think he's trying 28  
to be one and like, he's... I, dunno what to say! He's really nice. And 29  
his owner's um, so lovely. And she's normally really calm and with him, 30  
'cos normally I don't like people like tugging them around on their necks. 31  
And like, he's normally ok. And I stroke him and then kind of lays on my 32  
lap, and I keep on reading. And I feel so relaxed. And I have lots of fun. 33  
Like a game. 34

Researcher: Sounds like it's a really nice thing for you to do. Sounds like you really  
enjoy it. 35 36

Adam: Mmm-hmm. 37

Researcher: You said 'fun' a lot and 'relaxed' a lot too... Is that important? 38

Adam: Er, yeah, 'cos normally I always have to get, um, better with my reading 39  
'cos I get frustrated every time if I get anything wrong. Like, with um, my 40  
parents or teacher or friends, with a dog it will still listen, doesn't really 41  
care, and I kind of improve a bit more. And um, it's really... relaxing. 42  
'Cos I get frustrated, like, the dog kind of like lays down on me to kind of 43  
calm me down so then I feel like it's really listening to me. And it has a 44  
good time with me. And I always enjoy myself. 45

Researcher: Wow. Ok. So, do you think it's been helpful reading with \*dog\*? 46

Adam: Err... I think it... Yeah. It is quite helpful with \*dog\*. I don't know what 47  
to say about the helpful bit. What's nice and helpful... 48

Researcher: Has it helped you? 49

Adam: Oh, yeah, it's helped me improve my reading. My Mum and Dad, and 50  
Mr Xxx my teacher, and Mrs Xxx, are amazed with my reading now. 51

Researcher: Yeah? 52

Adam: 'Cos normally I couldn't get, like "at" or "a" right, I used to say "ah" 53  
instead of "ay" or like, I couldn't do any reading or anything, 'cos I was 54  
on the lowest level. And then now I've improved from level... 6 up to 55  
free reader, I can read any book now. 56

Researcher: Wow. 57

Adam: And I'm reading a Frank Lampard book what is quite hard but easy for 58  
me now, 'cos I've improved my reading. 59

Researcher: What do you think... What was it about reading with \*dog\*, that was, that 60  
made your reading improve so much? You said about, like when you 61  
get frustrated when you read, but \*dog\* doesn't care, he just listens to 62  
you. Do you think there was anything else going on that made you get 63  
so much better with your reading? 64

Adam: Like, it was quiet, and like he didn't interrupt or anything. And like, if I 65  
got a word wrong, like I said again, he wouldn't bark or any... If it was a 66  
person, they would kind of say it again, and like if it was a dog and like, it 67  
would not like, do anything, it would, and his owner says when I get 68  
anything wrong "he still thinks you're beautiful at reading" and I carry on 69

and I feel like I can believe in myself. And \*dog\* always like lays on me, 70  
and gives me like kisses and licks, and his owner says “he loves you 71  
‘cos your reading’s beautiful”. And I kind of feel really pleased for 72  
myself. And, yeah. 73

Researcher: Do you think that’s important, feeling pleased with yourself and like, 74  
believing in yourself? 75

Adam: Yeah, because I need to improve my reading a bit more because some 76  
words I need to practice on, but it doesn’t really matter if I get it wrong, 77  
at least I’m still persevering with my reading. ‘Cos... yeah... I need to 78  
get better with my reading ‘cos normally I get stuff wrong but at least I’m 79  
still going and trying my best to try and work my way through my 80  
learning. And I need to improve. And I need to work my way through 81  
my, um, well, reading that I’m trying to find, like the words I need to do. I 82  
get, I’m in this group and I’m practising every day for my time to read to 83  
\*dog\* and I have so much fun. And- 84

Researcher: Do you- oops, sorry, go on... 85

Adam: Oh. Sorry. And my teacher always says “you’re getting really better, I’m 86  
really pleased for you that you’re improving and that you’re trying to 87  
work these words out” and going on and on and on about “how good 88  
you are”. And my teacher said “I want to read to you one day” and I 89  
read to him one day and he was amazed. 90

Researcher: Yeah? 91

Adam: Yeah. He’s never heard me read like this anymore. ‘Cos when I used to 92  
be in there I was like “Oh, I can’t do this”. I kept moaning and I was 93  
frustrated. But now I read to \*dog\* it kind of shows me a way how to 94  
calm down. And his owner always says to me, and he... and he barked 95  
at me once. I can remember this... he barked at me once and he said, 96  
he said this to me, wh- what, his owner said this to me, and she said 97  
“he’s saying this, he thinks you’re really good, he might cry with tears” 98

Researcher: Awww, wow! 99

Adam: And um, I thought wow, that’s the nicest thing somebody’s said to me. 100  
And I was so, er, pleased. I couldn’t believe what she said. 101

Researcher: That is a really nice thing to hear, yeah. 102

Adam: I was really happy with myself, and I knew I could do this ‘cos the dog 103  
believed in me, Mrs Xxx believe in me, my parents, my friends, my 104  
teacher, and myself. I could believe in myself. Especially \*dog\* and 105

	people who are my friends said "I can believe in you that you can do	106
	this". One of my best friends once, said, my best friend called Xxx, he	107
	said "Do you think you've improved or not?" And it was a question. And	108
	I said, I think it's in the middle, but now I am improved I can do this. And	109
	he said "Well I'm pleased with you best friend". And we both laughed	110
	and chuckle all the time when I'm reading, 'cos I normally take fun of	111
	things, like what the animals are and like um... I'm normally, like really	112
	funny with my friends. And normally I, I get my book out and when	113
	somebody's like sad, I'm normally on that table there, just reading, and	114
	like somebody sad, my friends and some girls come over to me and say	115
	"this person's sad". And then sits down with me and then I go and I	116
	read, and it's easy to make somebody laugh like me... li- um, me, um,	117
	somebody like me to make them laugh, 'cos I just have, um... like I	118
	feel... it's hard to say. I feel like I can make people happy and give them	119
	a better, like, friend and like, I feel they can do things, that they can	120
	improve these things too. And I... I just get so pleased with myself that	121
	I'm doing these things.	122
Researcher:	So do you think that reading with *dog* has... helped you to be a better	123
	friend? Or do you think that you were already a good friend and funny	124
	and making people laugh before you read with *dog*?	125
Adam:	Er... I was really funny and sometimes quite, um... quite silly to the	126
	teachers, but not in a horrible like way, distracting people, just like	127
	having fun with them. And once, my friend Xxx that I said, he's normally	128
	horrible to me and like, er, he blames things on me. But now I'm reading	129
	to *dog* and he's reading to *dog*... wait no, that's not what I was	130
	gonna say... um... he normally blames things on me and like, all that,	131
	but now I'm reading to *dog* I normally calm down after I've read to him.	132
	For like a few minutes I'm ok and I get on with my work, and I'm never	133
	doing anything wrong. And whenever Mr, well, Xxx tells Mr Xxx that I've	134
	been silly, he says "No, I haven't even seen Adam done a thing, he	135
	sitting down getting on with his learning, so should you". Now he's doing	136
	the wrong thing and I'm doing the right thing.	137
Researcher:	So you think... tell me if I'm wrong, I want to make sure I've understood	138
	what you've said... It sounds like you were saying that you think that	139
	reading with *dog* has helped you to... be better in lessons?	140
Adam:	Yeah, spot on.	141
Researcher:	Spot on?	142

Adam:	Yeah.	143
Researcher:	Brilliant. Ok. Is there anything else you think it's helped you with?	144
Adam:	Oh, er... Mmm... Making me calm down.	145
Researcher:	Yeah?	146
Adam:	I think that was one I haven't said about. Like... Normally, I get calmed	147
	down 'cos it's all quiet in the room and... Like if, if it was in my class I'd	148
	not be able to read. I'd say to my teacher "can I go somewhere else?"	149
	and he'd say no, 'cos I'd have to stay with the class. 'Cos I normally,	150
	'cos after we've done our reading, we have to do a session, and then	151
	another session, and then go back to reading. But now I'm with *dog* in	152
	the afternoons on a Friday, I get on well with it. And normally we do a	153
	bit of reading in the Fridays in the afternoons, after I've read to *dog*.	154
	Um, it's like all the... all the shouting's gone and once I come back, I feel	155
	like, it was like reading to *dog*, when I came back, 'cos it was really	156
	quiet, and I got on and I finished, like the book. 'Cos I had only more	157
	like 5 pages to read, I got on with it 'cos it was so quiet, and I improved	158
	myself and I believed I could do it.	159
Researcher:	I sounds like there's lots of different things that it's been really useful for,	160
	like believing in yourself and other people believing in you, and being	161
	calm, and having fun, and feeling relaxed. You talked at the beginning	162
	about how, um, reading with *dog*, like, he would, he would lie down on	163
	you if he thought you were getting frustrated, he would lie down and that	164
	would help you to feel more relaxed.	165
Adam:	Mmm-hmm. Like supported what I meant.	166
Researcher:	Supported. Ok. Oh, that's a good word, supported. Ah... Can you tell	167
	me what you mean by that "supported"?	168
Adam:	Er... Well, what I mean is, it's kind of a short one this one is.	169
Researcher:	Yep.	170
Adam:	Like when I'm with a teacher, they'd kind of go off and I'm on my own,	171
	and I... And this is when I couldn't read but I tried to go but I couldn't feel	172
	su- well, I didn't feel supported in any way of me like going on and trying.	173
	Now I'm with *dog* he supports me around every corner I go when I'm	174
	reading.	175
Researcher:	Ok. Do you think it matters that *dog*'s a dog? D'you think it'd work so	176
	well if he wasn't a dog? Like-	177

Adam:	Doesn't matter if anybody's gonna read to a dog or a person, it's still	178
	reading and you're still improving. That's what I normally think. But if	179
	you was reading to like, well if you was talking to somebody else it might	180
	be a different point of view. And that's my point of reading to a dog.	181
Researcher:	How do you mean it might be a different point of view?	182
Adam:	Like, everybody says somebody's got a different point, well not all the	183
	time, someone might have the same and somebody might not, my	184
	points of view sometimes are like the same as others, sometimes they're	185
	not. And that's ok with me but sometimes if it's in like a copying me, I	186
	get really like... angry... and yeah... And they say it's kind of rubbish	187
	reading to a dog 'cos they bark but with *dog* he's a trained dog and	188
	they say things like that. And I respect *dog* as a friend, it doesn't	189
	matter if he's not a person, at least he's still my friend. As in a dog.	190
Researcher:	So, do you think... if you were... if you were reading with...	191
Adam:	[Incoherent]	192
Researcher:	Say again?	193
Adam:	If I was reading with my teacher... is that what you mean, it's like moving	194
	up a level, or not?	195
Researcher:	Yeah... I think I'm trying to work out, 'cos it sounds like it's been really	196
	useful for you, there's lots of good things you've talked about and you've	197
	used words like "reading beautifully" and it's been "fantastic" and it's	198
	been "fun" and you've felt "relaxed" and "supported" and "calm" and it's	199
	helped you in your lessons, and with your friends and loads of stuff. I	200
	think I'm wondering, if you felt this same kind of supported feeling and	201
	everything but if *dog* wasn't a dog, if he was a person, whether you	202
	think it would be as good? Or if he was a different kind of an animal, not	203
	just a dog. Do you think it would work as well?	204
Adam:	Yeah. Because like, if it wasn't a trained animal I wouldn't even read to	205
	it.	206
Researcher:	Not if it was a... If it wasn't trained?	207
Adam:	Yeah. It wasn't trained.	208
Researcher:	So it's got to be trained, that's important?	209
Adam:	Yeah, it's got to be trained.	210
Researcher:	I'm gonna write that down... trained... Why is that important?	211



Adam: Er, 'cos if I was reading and I tried my best to move up a level and it just, 212  
er, just um, interrupted, if I could use, um like and I forgot the word and 213  
like, I couldn't move up a level and it took me down a level 'cos I couldn't 214  
do it... If it, if I was a man and I like I was a teacher reading to... wait, 215  
no... er, I'm trying to say this to you. Like if I was a person who was 216  
reading to like, maybe like the Queen's like, or a King or somebody, 217  
yeah? 218

Researcher: Yeah 219

Adam: And er, they had a dog and it wasn't trained and like I came to, and then 220  
it, and then it would um bark in front of me, and I got the word wrong and 221  
like I kept getting every word wrong and I might lose my career or my job 222  
or something. 'Cos if it was my boss like in the room with me I would 223  
kind of get fired if I got the wrong word every time. And like... But if you 224  
still would of moved the dog out the, out the way, I'd still forget all the 225  
words 'cos from the first time I would forget the word and I'd get 226  
muddled up with it. I'd kind of feel sorry for myself. 227

Researcher: So, making a mistake the first time with the dog... if it wasn't a trained 228  
dog, if it was just a normal dog that hadn't had any training... and if you 229  
read with that dog and you made some mistakes, you think that that 230  
would keep making it difficult for you? Is that what you mean? 231

Adam: Yeah. Yeah. 232

Researcher: Yeah? And then even if the dog went away again you'd still find it 233  
difficult, 'cos you'd remember where you got it wrong. 234

Adam: Yeah, 'cos I wouldn't remember what it was. 235

Researcher: Ahhh... Ok... The first time you read with \*dog\*, did you make any 236  
mistakes then? 237

Adam: Some. Only 2 mistakes but... Now they're telling me that I'm getting 238  
beautiful at it... And Mrs Xxx gave me this Frank Lampard book the first 239  
time. And then my friend gave it, gave another one to me 'cos I'd 240  
finished the first one, and I got... And I got a new one from my friend and 241  
I read beautiful. And sometimes I make some mistakes and then I, and 242  
then, 'cos \*dog\*'s im-, 'cos \*dog\*'s changed, ch-, no, trained to be a dog 243  
who can like not interrupt a person reading, I can, I can um, like, keep 244  
going and then I can remember the words. And like, once, he barked at 245  
me, but he was trying to tell me something, and his owner said "that 246  
word's like, adventure". And I tried to say it and he kept barking, and it 247  
sounded like 2 words. And he said "I was-", um, no, and then the owner 248

	said “this is what he’s saying, he’s going on a adventure” so he’s like a	249
	Kipper book. Like, well, we’ve got these Kip- these books about some	250
	kids called Biff, Chip	251
Researcher:	Yeah! Biff and Chip and Kipper and the key.	252
Adam:	..and the key.	253
Researcher:	I know those books, yeah.	254
Adam:	And we have these books. And this Frank Lampard book, yeah, is just	255
	like it but just a bit more like, words that I can, a bit more words that I	256
	can approve on with my reading.	257
Researcher:	Like trickier words and stuff?	258
Adam:	Yeah. So like, I’m basically testing myself on these words.	259
Researcher:	What’s that like? Is that good?	260
Adam:	That is really good for me, ‘cos like I always say I need to improve my	261
	reading. And yeah...	262
Researcher:	I don’t think I’ve got any more questions. But I’m really pleased for you,	263
	it sounds like you’ve had a really good experience. Are you, are you	264
	reading again with *dog*?	265
Adam:	Yeah. If, I’m gonna move in Year 4. Mrs Xxx, she does like the reading,	266
	but Mrs Xxx stays with me doing it ‘cos she’s like a lady called, er... Well	267
	we’ve got a lady called Mrs Xxx and she helps people with like autism or	268
	like, yeah, and she helps me. And Mrs Xxx stays with me to help me	269
	out, ‘cos she’s just like Mrs Xxx. And um, I really have so much fun with	270
	Mrs Xxx, *dog* and his owner.	271
Researcher:	Thank you so much for telling me all about that. I’m really jealous, I’d	272
	like to go and read with *dog* now, sounds like good fun. Do you have	273
	any questions for me?	274
Adam:	Er, yeah, why do you want to um, find out like what’s it like to read to a	275
	dog?	276
Researcher:	Ooh, that’s a good question. I’m really interested ‘cos it’s a bit of an	277
	unusual thing. Like normally in schools, most schools, they don’t have	278
	dogs come in and children reading to them.	279
Adam:	So you’re saying, like the, normally reading to people?	280
Researcher:	Yeah. Normally, children read to people. But I had dogs, I have got	281
	anymore ‘cos they got really really old and they died, but I used to have	282
	dogs.	283

Adam:	That's like my dog, he- she got a bump on her back and, but she was	284
	really old	285
Researcher:	Yeah, my dogs were	286
Adam:	And it started to infection and then she died. And now I read to *dog* it	287
	can remember me of my dog called Xxx, she was a golden retriever. I	288
	feel so happy. And it feels like I'm reading to my golden retriever, Xxx,	289
	and I have so much fun.	290
Researcher:	Yeah?	291
Adam:	Yeah.	292
Researcher:	That's the thing. 'Cos I used to have dogs and I was trying to imagine	293
	what it would be like if, when I was little and I was learning how to read,	294
	what it would have been like reading to my dogs. And that makes me	295
	want to ask what it's like. And does it help, is it any good? It sounds like	296
	it is and it does.	297
Adam:	It does help a lot.	298
Researcher:	You, your golden retriever, what was her name?	299
Adam:	Xxx.	300
Researcher:	Xxx. Do you mind if I ask you a little bit about Xxx?	301
Adam:	Yeah, that's ok.	302
Researcher:	When you're reading with *dog*, do you think it would be as good, if you	303
	had never had a dog, if you'd never had Xxx. Like, if you'd never known	304
	what it was like to be around a dog...	305
Adam:	Oh!	306
Researcher:	Do you think that's made a difference? That you used to have a dog?	307
Adam:	Mmm. I used to have a dog but I didn't always used to see her 'cos my	308
	brother always got to take her on walks, and sometimes I got to. And	309
	um like, now she's gone, I kind of feel sorry for myself that I didn't quite	310
	get my time with her. Say that I loved her and all that 'cos she had to go	311
	and all that. And I wanted to like, see what it's like, to like look after a	312
	dog that's really nice. Normally I get emotional about reading to my- um,	313
	talking about my dog.	314
Researcher:	Yeah, that's why I asked if it was ok.	315
Adam:	But now I've got over it.	316
Researcher:	Yeah? Ok. Do you think *dog* helped with that as well?	317

Adam: Mmm. Yeah. A bit. 318

Researcher: How? 319

Adam: Oh... 320

Researcher: Hard question! 321

Adam: Yeah! Um. I don't know. It's quite hard to explain 'cos I normally didn't 322  
get to read to him or do- it's kind of confusing for me 'cos I never know 323  
what's going on. People don't tell me these things and then I get 324  
frustrated. And then I say "I don't know what's happening" and then I 325  
get really angry. But, like, if it was \*dog\* with me, and his owner asked if 326  
my Mum and D-, no, not my Mum and Dad, my teacher, um, like, he'd 327  
be there to like, and she'd be there to give me like, tell me to take him on 328  
a walk. And she maybe could talk to my teacher about like, what's been 329  
happening, why is he improving with my dog or something. If it was like 330  
that I'd just be amazed. And my teacher would get to know how I'm 331  
getting on and all that. If, but only if, she wanted to ask him or Mrs Xxx 332  
wanted to ask him, 'cos she might need to have to go feed \*dog\* or 333  
something. 'Cos my friend Xxx reads to him and it's quite a long time 334  
we read for him so like, er. Like, it was assembly right now, and um, 335  
like, after assembly we go back but right now as you're asking me 336  
questions, I'm kinda feeling like I can ask you questions. 'Cos um, Mr 337  
Xxx, my like teacher, he's a man and he's really nice to me. He says 338  
um, "you can, you're like really good at doing these things". Like he 339  
says... Like with my friends, they'll say I'm really good at these things. 340  
And I'm good at football and I'm good at reading. And I've got this Frank 341  
Lampard book, who plays for England. 342

Researcher: I've heard of Frank Lampard, I know who he is. 343

Adam: Yeah. And um, I normally get these things that I want but I always use 344  
my manners. Like, I said to \*dog\*, I said "please may I give you your 345  
treat?" And he was barking and he was running around in circles. And 346  
it looked like it was a yes. And I had to put the thing behind my back, 347  
and I had to say "paw" and I shook his hand, and I gave him his thing. 348  
And then he kept snuggling up to me and I kept hugging him. Um, while 349  
Mrs Xxx was talking to me about that I was still hugging him. And I was 350  
having so much fun with \*dog\*. It was like being with my friends when I 351  
was in pre-school. I got a boy called Xxx and he's my friend. And, like, 352  
him, me and him always, like, man-hugs we call it. We do like 353  
handshakes, like secret handshakes, where we go like that, then we do 354

that to each other and we go like that, pat on the back to each other. 355

And normally I done it with my friend Xxx. It's just like doing it to \*dog\* 356

but I don't really go like that, 'cos he has a paw. And, um, and all I do is 357

hug him and he barks, and barks, and barks. And he really likes me and 358

I really like him. I think I could improve with \*dog\* around me. When I 359

said it, like, he'll be there for, like every corner I go read to him or like 360

every day I go read to him, I get really excited, every day I do it. But he 361

still would help me with my learning, and my reading. 'Cos I could 362

persevere with my reading with \*dog\* around. And it's calm with him 363

around. I've said that like three times now. And, uh, yeah. That's about 364

it, I tried to say. And I really had fun with him when I've read to him. But 365

her mum was ill in hospital but I couldn't read to him. But I read to Mrs 366

Xxx instead and she said "if \*dog\* was here, what would it be like?" and 367

I would said, I would say, it's like reading to my chickens. 'Cos I've got 368

chickens. I normally sit outside and they come, and I put food around 369

my chair, I circle my chair with food, and they always listen to me. And 370

somehow I send them off to sleep with my reading. 371

Researcher: You sit at home, with chicken feed around your chair, and then you read 372

while the chickens eat all the food? 373

Adam: Yeah. 374

Researcher: Wow. So you're reading to chickens and dogs? 375

Adam: Yeah, normally they sit down. And like, normally they'll go to sleep, 376

normally they'll sit down and like, normally they'll go off but they'll still be 377

listening. 'Cos they'll be still around the food. And it's really fun just 378

reading to animals. I thought... One day, I might, I'm gonna be like a 379

person who wants to find out like animals, and go to like a college about 380

like animals and... Find some information. 'Cos I'm really based on 381

animals and football. Somedays I might go football on the weekends 382

and some days I might go work on, like, going to like lizards like, and 383

going round the world, finding these animals, how, um... Maybe I might 384

be an explorer or finding animals out, depends... 385

Researcher: Sounds very exciting. So you're quite into animals? 386

Adam: Yeah, I'm quite into \*dog\* too. Like how he's listening to me, 'cos she 387

normally says like, "he's listening to you and thinks you're beautiful at 388

reading". And she says that, and I'm always telling my mum this. I put it 389

into my head, and pretend that I said, pretend I came up with it myself. 390

And I tell my mum and she says "wow, that's quite good information, I've 391

never known that". And I'm normally pleased with myself, and I'm 392  
normally pleased with \*dog\*'s owner at knowing about these facts and 393  
then telling me. So then I can improve my, um, my board I've got at 394  
home about like Dogs. And I've got this dog book. My brother gave it to 395  
me, now I've got it. And I've got a lot of information about every dog in 396  
the world I think, about. And I normally go onto it. 397

Researcher: So that's, you're, the, \*dog\*'s owner tells you things about dogs and 398  
about \*dog\* and then you can add that information to your board? 399

Adam: Yeah. 400

Researcher: Cool. 401

Adam: 'Cos like, I've got this book and I looked up \*dog\*'s kind, and like I've got 402  
a lot of information about like \*dog\*'s kind. Now I've got information 403  
about \*dog\*. 'Cos \*dog\*'s kind of different, 'cos he's trained to be like a 404  
dog who's like for special needs, for kids, and... It's kind of helpful for 405  
me to learn about these animals and read also, to get these facts. 406

Researcher: Oooh... Wow... 407

Adam: That's about it, I think I can say. 408

Researcher: That's a lot! You've told me loads! I'm glad I didn't try and write it all 409  
down, there's no way I could've written all that down. Thank you very 410  
much. 411

Adam: You're welcome. 412

Researcher: And thank you for taking such a long time out of your afternoon and all 413  
your learning to come and tell me about it, but I've really enjoyed 414  
listening to all that. It was really interesting. Got lots for me to think 415  
about now. Mmm. Right, I'd better let you get back to your lessons. 416

Adam: Ok. I just wanted to tell you something. 417

Researcher: Yep? 418

Adam: It's ok for you to write like, what I said about on that recorder. That's ok 419  
to write down on the computer. 420

Researcher: That's ok? Thank you. 421

# Appendix 111: Example Annotated Transcript - Adam

## Transcript: CYP Interview #1

TEP: Can you tell me a bit about reading with [redacted]?

ADAM: Erm... It's... It kinda feels kind of calm cos when I read to some... somebody like my teacher, or like somebody yeah, they're kind of saying like "oh no, that's the wrong word" and I'd say "well, I kind of tried" but with a dog it kind of, it's kind of silence and like they kind of relax and then I kind of feel happy for what I'm doing for the dog. And normally Mrs [redacted] says "do you think you could do this?" or like "do you want me to help you out?" and normally I say ok, and sometimes he lays on me and I kind of feel relaxed cos normally um, if it was a person, it kind of had a go at me, yeah? And erm. It's quite fun to read to a dog like [redacted]. And I always like to give him his biscuits and feed him and read to him. Cos I find it really fun. And sometimes I er... what was it I do... Er, my friend called [redacted] he reads to him. And I normally say to Mrs [redacted], does [redacted] like these things, or like, does [redacted] like, how does [redacted] find it like nice and then I kind of feel pleased with myself that I'm... basically I'm giving him a rest and I sometimes I kind of like it, cos like, all dogs has to have a little rest. And erm, I... normally um... feed him food and then I kind of feel like he's a really nice dog at the dog I always wanted to read to. And Mrs [redacted] got a dog called [redacted] but I don't think I'm allowed to read to him. Instead I get to read to Dudley which is fantastic 'cos his owner's really nice to me. And I normally say to my Mum and Dad like, I read really good and like, his owner and Mrs [redacted] and him, he kind of barks at me and then his owner says he's pleased with me for like reading very well. And he normally goes to sleep and then she tells me that my reading's beautiful, so I kind of feel really, really happy. It's like the time of my life reading to [redacted].

TEP: Wow!

ADAM: Mmm. And I really like him and... he's... nice. He's... I think he's trying to be one and like, he's... I dunno what to say! He's really nice. And his owner's um, so lovely. And she's normally really calm and with him, 'cos normally I don't like people like tugging them around on their necks. And like, he's normally ok. And I stroke him and then kind of lays on my lap, and I keep on reading. And I feel so relaxed. And I have lots of fun. Like a game.

TEP: Sounds like it's a really nice thing for you to do. Sounds like you really enjoy it.

ADAM: Mmm-hmm.

TEP: You said 'fun' a lot and 'relaxed' a lot too... Is that important?

ADAM: Er, yeah, 'cos normally I always have to get, um, better with my reading 'cos I get frustrated every time if I get anything wrong. Like, with um, my parents or teacher or friends, with a dog it will still listen, doesn't really care, and I kind of improve a bit more. And um, it's really... relaxing. 'Cos I get frustrated, like, the dog kind of like lays down on me to kind of calm me down so then I feel like it's really listening to me. And it has a good time with me. And I always enjoy myself.

feeling calm / comparing to being told you're wrong / reading to teacher  
comparing voice / enjoying animal listening  
helping dog / checking self belief  
anticipating help / animal touching  
relaxing / being told off /  
having fun / feeding dog / reading to dog  
having fun / friends reading with dog  
showing interest in dog's likes  
feeling pleased in self  
giving dog rest / dog wandering rest  
Using dog attitude. poor quality / feeding dog  
being allowed to read in certain dog  
off in mood other dog / dog answer being nice  
reporting/laughing, good reading to parents  
being praised. just reading  
attributing dog's sleep to 'beautiful' and is / feeling  
praising as big pos exp. something

Using dog / implying dog conscious behavior.  
dog being nice / owner being nice / animal being ok  
reading dogs roughly  
teaching dog / keeping going  
feeling relaxed / having fun

reading to improve / being frustrated  
dogs listening  
dogs uninterested in mistakes, leading to imp  
dog responding to emotions / dog acting in calm  
seeing dog but as proof of listening / behaving dog  
was good for  
/any saying

# Transcript: CYP Interview #1

TEP: Wow. Ok. So, do you think it's been helpful reading with [redacted]?

ADAM: Err... I think it... Yeah. It is quite helpful with [redacted]. I don't know what to say about the helpful bit. What's nice and helpful...

TEP: Has it helped you?

ADAM: Oh, yeah, it's helped me improve my reading. My Mum and Dad, and [redacted] my teacher, and Mrs [redacted] are amazed with my reading now.

TEP: Yeah?

ADAM: 'Cos normally I couldn't get, like "at" or "a" right, I used to say "ay" instead of "at" or like, I couldn't do any reading or anything, 'cos I was on the lowest level. And then now I've improved from level... 6 up to free reader, I can read any book now.

TEP: Wow.

ADAM: And I'm reading a Frank Lampard book what is quite hard but easy for me now, 'cos I've improved my reading.

TEP: What do you think... What was it about reading with [redacted] that was, that made your reading improve so much? You said about, like when you get frustrated when you read, but [redacted] doesn't care, he just listens to you. Do you think there was anything else going on that made you get so much better with your reading?

ADAM: Like, it was quiet, and like he didn't interrupt or anything. And like, if I got a word wrong, like I said again, he wouldn't bark or any... If it was a person, they would kind of say it again, and like if it was a dog and like, it would not like, do anything, it would, and his owner says when I get anything wrong "he still thinks you're beautiful at reading" and I carry on and I feel like I can believe in myself. And [redacted] always like lays on me, and gives me like kisses and licks, and his owner says "he loves you 'cos your reading's beautiful". And I kind of feel really pleased for myself. And, yeah.

TEP: Do you think that's important, feeling pleased with yourself and like, believing in yourself?

ADAM: Yeah, because I need to improve my reading a bit more because some words I need to practice on, but it doesn't really matter if I get it wrong, at least I'm still persevering with my reading. 'Cos... yeah... I need to get better with my reading 'cos normally I get stuff wrong but at least I'm still going and trying my best to try and work my way through my learning. And I need to improve. And I need to work my way through my, um, well, reading that I'm trying to find, like the words I need to do. I get, I'm in this group and I'm practising every day for my time to read to [redacted] and I have so much fun. And-

TEP: Do you- oops, sorry, go on...

*(helping to) improving reading  
adults being amazed at progress  
prev. making mistakes - demonstrating progress  
being able to read / moving from lowest level  
having freedom of read choice*

*accessing hard books*

*not being interrupted / mistakes being upon  
being corrected / prompted  
dog not acting on mistakes  
owner translating for dog / praise on / helping  
dog teaching / dog clear effort / helping  
owner assisting / owner who had to be  
feeling pleased to self*

*reading to improve reading / reading practice  
persevering / mistakes are encouraged  
reading to improve / making mistakes / keeping going  
trying best / making through reading practice  
practising reading / rehearsing for dog  
having fun*



# Transcript CYP Interview #1

ADAM: Oh. Sorry. And my teacher always says "you're getting really better, I'm really pleased for you that you're improving and that you're trying to work these words out" and going on and on and on about "how good you are". And my teacher said "I want to read to you one day" and I read to him one day and he was amazed.

TEP: Yeah?

ADAM: Yeah. He's never heard me read like this any more. 'Cos when I used to be in there I was like "Oh, I can't do this". I kept moaning and I was frustrated. But now I read to [redacted] it kind of shows me a way how to calm down. And his owner always says to me, and he... and he barked at me once. I can remember this... he barked at me once and he said, he said this to me, wh- what, his owner said this to me, and she said "he's saying this, he thinks you're really good, he might cry with tears"

TEP: Awwww, wow!

ADAM: And um, I thought wow, that's the nicest thing somebody's said to me. And I was so, er, pleased. I couldn't believe what she said.

TEP: That is a really nice thing to hear, yeah.

ADAM: I was really happy with myself, and I knew I could do this 'cos the dog believed in me, Mrs [redacted] believe in me, my parents, my friends, my teacher, and myself. I could believe in myself. Especially [redacted] and people who are my friends said "I can believe in you that you can do this". One of my best friends once, said, my best friend called [redacted] he said "Do you think you've improved or not?" And it was a question. And I said, I think it's in the middle, but now I am improved I can do this. And he said "Well I'm pleased with you best friend". And we both laughed and chuckle all the time when I'm reading, 'cos I normally take fun of things, like what the animals are and like um... I'm normally, like really funny with my friends. And normally I, I get my book out and when somebody's like sad, I'm normally on that table there, just reading, and like somebody sad, my friends and some girls come over to me and say "this person's sad". And then sits down with me and then I go and I read, and it's easy to make somebody laugh like me... li- um, me, um, somebody like me to make them laugh, 'cos I just have, um... like I feel... it's hard to say. I feel like I can make people happy and give them a better, like, friend and like, I feel they can do things, that they can improve these things too. And I... I just get so pleased with myself that I'm doing these things.

TEP: So do you think that reading with [redacted] has... helped you to be a better friend? Or do you think that you were already a good friend and funny and making people laugh before you read with [redacted]?

ADAM: Er... I was really funny and sometimes quite, um... quite silly to the teachers, but not in a horrible like way, distracting people, just like having fun with them. And once, my friend [redacted] that I said, he's normally horrible to me and like, er, he blames things on me. But now I'm reading to [redacted] and he's

teacher praising progress  
praising efforts / repeating praise  
wanting to hear read  
teacher being amazed

other experiences of reading  
moaning / being frustrated / dog showing barking  
dog barking  
having as communicating  
owner reacting for dog / dog emotion response

reflecting on praise  
being encouraged by praise

being happy in self / dog believing in self /  
what's motivating self / belief  
telling belief in him / importance of belief  
overcoming progress / impact?  
feeling optimistic / self belief  
friends being pleased / laughing when reading  
having fun in reading  
being funny / reading to cheer up others  
reading everything / activity /  
reading to cheer up others  
making people laugh  
making people happy / enjoying  
being better friend / encouraging / helping others  
being pleased in self

being funny / being silly to the teachers  
having fun with them  
other's blaming things  
being blamed by others

## Transcript: CYP Interview #1

reading to [redacted]... wait no, that's not what I was gonna say... um... he normally blames things on me and like, all that, but now I'm reading to [redacted] I normally calm down after I've read to him. For like a few minutes I'm ok and I get on with my work, and I'm never doing anything wrong. And whenever Mr. well, [redacted] tells [redacted] that I've been silly, he says "No, I haven't even seen [redacted] done a thing, he sitting down getting on with his learning, so should you". Now he's doing the wrong thing and I'm doing the right thing.

TEP: So you think... tell me if I'm wrong, I want to make sure I've understood what you've said... It sounds like you were saying that you think that reading with [redacted] has helped you to... be better in lessons?

ADAM: Yeah, spot on.

TEP: Spot on?

ADAM: Yeah.

TEP: Brilliant. Ok. Is there anything else you think it's helped you with?

ADAM: Oh, er... Mmm... Making me calm down.

TEP: Yeah?

ADAM: I think that was one I haven't said about. Like... Normally, I get calmed down 'cos it's all quiet in the room and... Like if, if it was in my class I'd not be able to read. I'd say to my teacher "can I go somewhere else?" and he'd say no, 'cos I'd have to stay with the class. 'Cos I normally, 'cos after we've done our reading, we have to do a session, and then another session, and then go back to reading. But now I'm with [redacted] in the afternoons on a Friday, I get on well with it. And normally we do a bit of reading in the Fridays in the afternoons, after I've read to [redacted]. Um, it's like all the... all the shouting's gone and once I come back, I feel like, it was like reading to [redacted], when I came back, 'cos it was really quiet, and I got on and I finished, like the book. 'Cos I had only more like 5 pages to read, I got on with it 'cos it was so quiet, and I improved myself and I believed I could do it.

TEP: I sounds like there's lots of different things that it's been really useful for, like believing in yourself and other people believing in you, and being calm, and having fun, and feeling relaxed. You talked at the beginning about how, um, reading with [redacted], like, he would, he would lie down on you if he thought you were getting frustrated, he would lie down and that would help you to feel more relaxed.

ADAM: Mmm-hmm. Like supported what I meant.

TEP: Supported. Ok. Oh, that's a good word, supported. Ah... Can you tell me what you mean by that "supported"?

ADAM: Er... Well, what I mean is, it's kind of a short one this one is.

TEP: Yep.

editing variation / being blamed  
calming down after reading a story  
getting on with work / feeling supported  
reading frequently about school  
sitting on a beanbag chair  
doing the right thing

calming down

calming down / being quiet from noise  
being able to read in class  
asking to read elsewhere  
having lessons after reading  
getting on well with a dog  
doing more reading afterwards  
shorter steps / returning to class  
finishing a book / borrowing from quiet  
getting on when quiet / self belief

feeling supported

## Transcript: CYP Interview #1

ADAM: Like when I'm with a teacher, they'd kind of go off and I'm on my own, and I... And this is when I couldn't read but I tried to go but I couldn't feel su- well, I didn't feel supported in any way of me like going on and trying. Now I'm with [redacted] he supports me around every corner I go when I'm reading.

TEP: Ok. Do you think it matters that [redacted] a dog? D'you think it'd work so well if he wasn't a dog? Like-

ADAM: Doesn't matter if anybody's gonna read to a dog or a person, it's still reading and you're still improving. That's what I normally think. But if you was reading to like, well if you was talking to somebody else it might be a different point of view. And that's my point of reading to a dog.

TEP: How do you mean it might be a different point of view?

ADAM: Like, everybody says somebody's got a different point, well not all the time, someone might have the same and somebody might not, my points of view sometimes are like the same as others, sometimes they're not. And that's ok with me but sometimes if it's in like a copying me, I get really like... angry... and yeah... And they say it's kind of rubbish reading to a dog 'cos they bark but with [redacted] he's a trained dog and they say things like that. And I respect [redacted] as a friend, it doesn't matter if he's not [redacted] a person, at least he's still my friend. As in a dog.

TEP: So, do you think... if you were... if you were reading with...

ADAM: (Incoherent)

TEP: Say again?

ADAM: If I was reading with my teacher... is that what you mean, it's like moving up a level, or not?

TEP: Yeah... I think I'm trying to work out 'cos it sounds like it's been really useful for you, there's lots of good things you've talked about and you've used words like "reading beautifully" and it's been "fantastic" and it's been "fun" and you've felt "relaxed" and "supported" and "calm" and it's helped you in your lessons, and with your friends and loads of stuff. I think I'm wondering, if you felt this same kind of supported feeling and everything but if [redacted] wasn't a dog, if he was a person, whether you think it would be as good? Or if he was a different kind of an animal, not just a dog. Do you think it would work as well?

ADAM: Yeah. Because like, if it wasn't a trained animal I wouldn't even read to it.

TEP: Not if it was a... If it wasn't trained?

ADAM: Yeah. It wasn't trained.

TEP: So it's got to be trained, that's important?

ADAM: Yeah, it's got to be trained.

TEP: I'm gonna write that down... trained... Why is that important?

leaves leaving - being left alone  
not feeling supported - trying to read  
Dog supporting in reading

reading to any audience, practice?  
sharing own view recognising other's view

acknowledging different viewpoints  
standard view  
being copied/imitated  
often discussing meaning the dog  
emphasising dog's training / respecting dog  
being friends in dog

valuing dog's training / qualification

importance of training

## Transcript: CYP Interview #1

ADAM: Er, 'cos if I was reading and I tried my best to move up a level and it just, er, just um, interrupted, if I could use, um like and I forgot the word and like, I couldn't move up a level and it took me down a level 'cos I couldn't do it... if it, if I was a man and I like I was a teacher reading to... wait, no... er, I'm trying to say this to you. Like if I was a person who was reading to like, maybe like the Queen's like, or a King or somebody, yeah?

TEP: Yeah

ADAM: And er, they had a dog and it wasn't trained and like I came to, and then it, and then it would um bark in front of me, and I got the word wrong and like I kept getting every word wrong and I might lose my career or my job or something. 'Cos if it was my boss like in the room with me I would kind of get fired if I got the wrong word every time. And like... But if you still would of moved the dog out the, out the way, I'd still forget all the words 'cos from the first time I would forget the word and I'd get muddled up with it. I'd kind of feel sorry for myself.

TEP: So, making a mistake the first time with the dog... if it wasn't a trained dog, if it was just a normal dog that hadn't had any training... and if you read with that dog and you made some mistakes, you think that that would keep making it difficult for you? Is that what you mean?

ADAM: Yeah. Yeah.

TEP: Yeah? And then even if the dog went away again you'd still find it difficult, 'cos you'd remember where you got it wrong.

ADAM: Yeah, 'cos I wouldn't remember what it was.

TEP: Ahh... Ok... The first time you read with [redacted], did you make any mistakes then?

ADAM: Some. Only 2 mistakes but... Now they're telling me that I'm getting beautiful at it... And Mrs [redacted] gave me this Frank Lampard book the first time. And then my friend gave it, gave another one to me 'cos I'd finished the first one, and I got... And I got a new one from my friend and I read beautiful. And sometimes I make some mistakes and then I, and then, 'cos [redacted]'s im-, 'cos [redacted]'s changed, ch-, no, trained to be a dog who can like not interrupt a person reading, I can, I can um, like, keep going and then I can remember the words. And like, once, he barked at me, but he was trying to tell me something, and his owner said "that word's like, adventure". And I tried to say it and he kept barking, and it sounded like 2 words. And he said "I was", um, no, and then the owner said "this is what he's saying, he's going on a adventure" so he's like a Kipper book. Like, well, we've got these Kip- these books about some kids called Biff, Chip

TEP: Yeah! Biff and Chip and Kipper and the key.

ADAM: ...and the key.

TEP: I know those books, yeah..

being interrupted / trying to progress  
forgetting words being told back  
imagining someone's  
reading to VIPs - important audience  
reading being vital at times

untrained dogs interrupting  
imitative/repeating mistakes  
consequence of failed reading  
continual mistakes - wrong dog  
negating neg. effect  
feeling sorry for self

remembering mistakes

not remembering words  
- reading as remembering

being told getting beautiful  
being given Frank Lampard book  
having book getting owner's name  
making some mistakes  
telling that dog interrupting being told  
remembering words barking the owner  
named "adventure" for dog  
comparing dog to fictional characters

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ADAM: And we have these books. And this Frank Lampard book, yeah, is just like it but just a bit more like, words that I can, a bit more words that I can approve on with my reading.

TEP: Like trickier words and stuff?

ADAM: Yeah. So like, I'm basically testing myself on these words.

TEP: What's that like? Is that good?

ADAM: That is really good for me, 'cos like I always say I need to improve my reading. And yeah...

TEP: I don't think I've got any more questions. But I'm really pleased for you, it sounds like you've had a really good experience. Are you, are you reading again with [redacted]?

ADAM: Yeah. If, I'm gonna move in Year 4. [redacted], she does like the reading, but Mrs [redacted] stays with me doing it 'cos she's like a lady called, er... Well we've got a lady called [redacted] and she helps people with like autism or like, yeah, and she helps me. And Mrs [redacted] stays with me to help me out, 'cos she's just like [redacted]. And um, I really have so much fun with Mrs [redacted], [redacted] and his owner.

TEP: Thank you so much for telling me all about that. I'm really jealous, I'd like to go and read with [redacted] now, sounds like good fun. Do you have any questions for me?

ADAM: Er, yeah, why do you want to um, find out like what's it like to read to a dog?

TEP: Ooh, that's a good question. I'm really interested 'cos it's a bit of an unusual thing. Like normally in schools, most schools, they don't have dogs come in and children reading to them.

ADAM: So you're saying, like the, normally reading to people?

TEP: Yeah. Normally, children read to people. But I had dogs, I have got anymore 'cos they got really really old and they died, but I used to have dogs.

ADAM: That's like my dog, he- she got a bump on her back and, but she was really old

TEP: Yeah, my dogs were

ADAM: And it started to infection and then she died. And now I read to [redacted] it can remember me of my dog called [redacted], she was a golden retriever. I feel so happy. And it feels like I'm reading to my golden retriever, [redacted], and I have so much fun.

TEP: Yeah?

ADAM: Yeah.

TEP: That's the thing. 'Cos I used to have dogs and I was trying to imagine what it would be like if, when I was little and I was learning how to read, what it would have been like reading to my dogs. And that makes me want to ask what it's like. And does it help, is it any good? It sounds like it is and it does.

comparing books  
improving reading through book choice  
reading out

Saying read to improve

Reading future  
grouping kids when need help  
company helping adults  
company having fun

being interested in researches related

surprise of adverbally read people

dogs aging

remembering pets  
feeling happy  
liking read to dog in pet - having fun

ADAM

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ADAM: It does help a lot.

TEP: You, your golden retriever, what was her name?

ADAM: [redacted]

TEP: [redacted] Do you mind if I ask you a little bit about [redacted]?

ADAM: Yeah, that's ok.

TEP: When you're reading with [redacted], do you think it would be as good, if you had never had a dog, if you'd never had [redacted]. Like, if you'd never known what it was like to be around a dog...

ADAM: Oh!

TEP: Do you think that's made a difference? That you used to have a dog?

ADAM: Mmm. I used to have a dog but I didn't always used to see her 'cos my brother always got to take her on walks, and sometimes I got to. And um like, now she's gone, I kind of feel sorry for myself that I didn't quite get my time with her. Say that I loved her and all that 'cos she had to go and all that. And I wanted to like, see what it's like, to like look after a dog that's really nice. Normally I get emotional about reading to my- um, talking about my dog.

TEP: Yeah, that's why I asked if it was ok.

ADAM: But now I've got over it.

TEP: Yeah? Ok. Do you think [redacted] helped with that as well?

ADAM: Mmm. Yeah. A bit.

TEP: How?

ADAM: Oh...

TEP: Hard question!

ADAM: Yeah! Um. I don't know. It's quite hard to explain 'cos I normally didn't get to read to him or do- it's kind of confusing for me 'cos I never know what's going on. People don't tell me these things and then I get frustrated. And then I say "I don't know what's happening" and then I get really angry. But, like, if it was [redacted] with me, and his owner asked if my Mum and Dad, no, not my Mum and Dad, my teacher, um, like, he'd be there to like, and she'd be there to give me like, tell me to take him on a walk. And she maybe could talk to my teacher about like, what's been happening, why is he improving with my dog or something. If it was like that I'd just be amazed. And my teacher would get to know how I'm getting on and all that. If, but only if, she wanted to ask him or Mrs [redacted] wanted to ask him, 'cos she might need to have to go feed [redacted] or something. 'Cos my friend [redacted] reads to him and it's quite a long time we read for him so like, er. Like, it was assembly right now, and um, like, after assembly we go back but right now as you're asking me questions, I'm kinda feeling like I can ask you

confusing read a dog as helping

having pets - having helped out a lot  
feeling sorry pet's gone  
saying feelings for pet in everyday  
being around pet ourselves  
reading constantly to talking about pet

not reading  
having trouble articulating ideas in pet  
being confused not being able to write  
feeling frustrated feeling angry  
being able to write / spend time in dog  
adults encourage/forcing reasons for going  
reading finding out  
adults wanting to know  
dog having words able to read  
reading for long time  
being a bit more

feeling frustrated  
disappointed

staying what  
helped

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questions. 'Cos um, [redacted], my like teacher, he's a man and he's really nice to me. He says um, "you can, you're like really good at doing these things". Like he says... Like with my friends, they'll say I'm really good at these things. And I'm good at football and I'm good at reading. And I've got this Frank Lampard book, who plays for England.

TEP: I've heard of Frank Lampard, I know who he is.

ADAM: Yeah. And um, I normally get these things that I want but I always use my manners. Like, I said to [redacted], I said "please may I give you your treat?" And he was barking and he was running around in circles. And it looked like it was a yes. And I had to put the thing behind my back, and I had to say "paw" and I shook his hand, and I gave him his thing. And then he kept snuggling up to me and I kept hugging him. Um, while Mrs [redacted] was talking to me about that I was still hugging him. And I was having so much fun with [redacted]. It was like being with my friends when I was in pre-school. I got a boy called [redacted] and he's my friend. And, like, him, me and him always, like, man-hugs we call it. We do like handshakes, like secret handshakes, where we go like that, then we do that to each other and we go like that, pat on the back to each other. And normally I done it with my friend [redacted]. It's just like doing it to [redacted] but I don't really go like that, 'cos he has a paw. And, um, and all I do is hug him and he barks, and barks, and barks. And he really likes me and I really like him. I think I could improve with [redacted] around me. When I said it, like, he'll be there for, like every corner I go read to him or like every day I go read to him, I get really excited, every day I do it. But he still would help me with my learning, and my reading. 'Cos I could persevere with my reading with [redacted] around. And it's calm with him around. I've said that like three times now. And, uh, yeah. That's about it, I tried to say. And I really had fun with him when I've read to him. But her mum was ill in hospital but I couldn't read to him. But I read to Mrs [redacted] instead and she said "if [redacted] was here, what would it be like?" and I would say, I would say, it's like reading to my chickens. 'Cos I've got chickens. I normally sit outside and they come, and I put food around my chair, I circle my chair with food, and they always listen to me. And somehow I send them off to sleep with my reading.

TEP: You sit at home, with chicken feed around your chair, and then you read while the chickens eat all the food?

ADAM: Yeah.

TEP: Wow. So you're reading to chickens and dogs?

ADAM: Yeah, normally they sit down. And like, normally they'll go to sleep, normally they'll sit down and like, normally they'll go off but they'll still be listening. 'Cos they'll be still around the food. And it's really fun just reading to animals. I thought... One day, I might, I'm gonna be like a person who wants to find out like animals, and go to like a college about like animals and... Find some information. 'Cos I'm really based on animals and football. Somedays I might go football on the weekends and some days I might

deciding being nice

friends saying being good at school things

using manners

feeding dogs carrying things thinking dog

having secret handshakes sharing secrets in friends

compaine in pre-school hugging having mutual like/hugging rich other

getting excited about reading in dog

calm down reflecting on narrative - input of text

comparing to other animals reading to chickens

wishing animals to reading

reading animals animals listening to teacher

wanting to find out about animals

being interested in animals

expressing pos self image

connecting to dog

dog eating self belief

reading to animals

enjoying animals

being interested in animals

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go work on, like, going to like lizards like, and going round the world, finding these animals, how, um... Maybe I might be an explorer or finding animals out, depends...

TEP: Sounds very exciting. So you're quite into animals?

ADAM: Yeah, I'm quite into [redacted] too. Like how he's listening to me, 'cos she normally says like, "he's listening to you and thinks you're beautiful at reading". And she says that, and I'm always telling my mum this. I put it into my head, and pretend that I said, pretend I came up with it myself. And I tell my mum and she says "wow, that's quite good information, I've never known that". And I'm normally pleased with myself, and I'm normally pleased with [redacted]'s owner at knowing about these facts and then telling me. So then I can improve my, um, my board I've got at home about like Dogs. And I've got this dog book. My brother gave it to me, now I've got it. And I've got a lot of information about every dog in the world I think, about. And I normally go onto it.

TEP: So that's, you're, the, [redacted]'s owner tells you things about dogs and about [redacted] and then you can add that information to your board?

ADAM: Yeah.

TEP: Cool.

ADAM: 'Cos like, I've got this book and I looked up [redacted]'s kind, and like I've got a lot of information about like [redacted]'s kind. Now I've got information about [redacted]. 'Cos [redacted]'s kind of different, 'cos he's trained to be like a dog who's like for special needs, for kids, and... It's kind of helpful for me to learn about these animals and read also, to get these facts.

TEP: Oooh... Wow....

ADAM: That's about it, I think I can say.

TEP: That's a lot! You've told me loads! I'm glad I didn't try and write it all down, there's no way I could've written all that down. Thank you very much.

ADAM: You're welcome.

TEP: And thank you for taking such a long time out of your afternoon and all your learning to come and tell me about it, but I've really enjoyed listening to all that. It was really interesting. Got lots for me to think about now. Mmm. Right, I'd better let you get back to your lessons.

ADAM: Ok. I just wanted to tell you something.

TEP: Yep?

ADAM: It's ok for you to write like, what I said about on that recorder. That's ok to write down on the computer.

TEP: That's ok? Thank you.

finding out about animals  
discovering animals

being interested in dog's responses  
over interpreting  
sharing info about dogs  
knowing about animals/dogs  
collecting info about dogs  
others speaking whilst in dogs  
regarding

finding info about dogs  
dogs being trained  
info being helpful